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FBP10117 Certificate I in Food Processing

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Qualification Description

This qualification provides the basic skills and knowledge required for entry level workers in the food processing industries for a range of sectors including:

- grain processing (including stock feed, animal feeds, milling wheat, barley, oats and flour milling)
- baking (including large scale production of cakes, pastry, bread, biscuits and plant baking)
- retail baking
- beverages (including juices, soft drinks, cordials, aerated and still waters, energy drinks and other modified beverages, such as vitamin and antioxidant beverages, coffee, tea and ice)
- confectionery
- dairy processing
- fruit and vegetables
- grocery products and supplies (including honey, jams, spreads, sauces, dressings, condiments, spices, edible oils and fats and pasta)
- poultry.

The qualification is designed for application in a highly supervised context, such as VET in schools, induction to industry, or other equivalent introductory environments. All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 9 units of competency:
 - 4 core units plus
 - 5 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 1 must be selected from Group A. If this qualification is to be applied in a work environment where food is processed for non-human consumption, such as pet food and stock feed or other situations where human food safety skills are not required, FBPOPR2032 Apply work procedures to maintain integrity of product should be selected.
- 3 must be selected from Group B
- 1 may be selected from remaining units in Group B or any currently endorsed Training Package or accredited course packaged at a Certificate I or Certificate II.

Core Units

FBPOPR1003	Communicate workplace information
FBPOPR1009	Follow work procedures to maintain quality
FBPWHS1001	Identify safe work practices
MSMENV272	Participate in environmentally sustainable work practices

Elective Units

Group A

FBPFSY1001	Follow work procedures to maintain food safety
FBPOPR2032	Apply work procedures to maintain integrity of product.

Group B

FBPOPR1001	Pack or unpack product manually
FBPOPR1002	Operate automated washing equipment
FBPOPR1004	Prepare basic mixes

FBPOPR1005	Operate basic equipment
FBPOPR1006	Monitor process operation
FBPOPR1007	Participate effectively in a workplace environment
FBPOPR1008	Take and record basic measurements
FBPRBK1001	Finish products
FDFOP1003A	Carry out manual handling tasks
FDFOP2061A	Use numerical applications in the workplace
FDFWIN1001 A	Identify key operations in wine production
FDFWIN1002 A	Identify viticulture processes
SIRXSLS002	Follow point-of-sale procedures
SITXCCS003	Interact with customers
TLIA2014	Use product knowledge to complete work operations

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP10117 Certificate I in Food Processing	FDF10111 Certificate I in Food Processing	Updated to meet Standards for Training Packages Packaging Rules clarified to reflect delivery of this qualification for processing of food for non-human and human consumption Imported units updated or deleted	Equivalent qualification

Links

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FBP10217 Certificate I in Baking

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the basic skills and knowledge of an individual preparing for entry level work or training in a commercial baking environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 8 units of competency:
 - 6 core units plus
 - 2 elective units.

Elective units must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome.

The electives are to be chosen as follows:

- 1 from the electives listed below

- 1 from the electives listed below, or any currently endorsed Training Package or accredited course that is packaged at a Certificate I or II level.

Core Units

FBPFSY1001	Follow work procedures to maintain food safety
FBPOPR1004	Prepare basic mixes
FBPOPR1005	Operate basic equipment
FBPRBK1001	Finish products
FBPWHS1001	Identify safe work practices
FSKNUM09	Identify, measure and estimate familiar quantities for work

Elective Units

FBPRBK2001	Assist non laminated pastry production
FBPRBK2003	Assist sponge cake production
FBPRBK2004	Assist basic bread production

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP10217 Certificate I in Baking	Not applicable	New qualification	No equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP20117 Certificate II in Food Processing

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge for food processing workers employed in the following sectors:

- grain processing (including stock feed, animal feeds, milling wheat, barley, oats and flour milling)
- baking (including large scale production of cakes, pastry, bread, biscuits and plant baking)
- retail baking
- beverages (including juices, soft drinks, cordials, aerated and still waters, energy drinks and other modified beverages, such as vitamin and antioxidant beverages, coffee, tea and ice)
- confectionery
- dairy processing
- fruit and vegetables
- grocery products and supplies (including honey, jams, spreads, sauces, dressings, condiments, spices, edible oils and fats and pasta)
- poultry.

This qualification is designed for application in supervised environments where the work is predictable with some basic problem solving requirements. All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this qualification at the time of publication.

^ **From 1 July 2022 the elective unit HLTAID002 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID010** - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 13 units of competency:
 - 4 core units plus
 - 9 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 1 must be selected from Group A. If this qualification is to be applied in a work environment where food is processed for non-human consumption, such as pet food and stock feed or other situations where human food safety skills are not required, then *FBPOPR2032 Apply work procedures to maintain integrity of product* should be selected.
- 5 must be selected from Group B
- 1 must be selected from Group B or Group C
- 2 may be selected from the remaining units in Groups B or C, or any currently endorsed Training Package or accredited course packaged at Certificate I (maximum 1 unit), Certificate II or Certificate III (maximum 1 unit) levels.

Core Units

FDFOHS2001 A	Participate in OHS processes
FDFOP2063A	Apply quality systems and procedures
FDFOP2064A	Provide and apply workplace information
MSMENV272	Participate in environmentally sustainable work practices

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

FBPOPR2032	Apply work procedures to maintain integrity of product
FDFFS2001A	Implement the food safety program and procedures

Group B – Sector Specialist and Cross Sector elective units

Baking

FBPOPR2024	Operate a cooling, slicing and wrapping process
FBPOPR2055	Freeze dough
FBPPBK2001	Operate a cooling and slicing process
FBPPBK2002	Operate a pastry forming and filling process
FBPPBK2003	Manufacture rye crisp breads
FBPPBK2004	Manufacture wafer products
FBPPBK2005	Operate a doughnut making process
FBPPBK2006	Operate a griddle production process
FBPPBK2007	Operate a pastry production process

Beverages

FBPBEV2001	Operate a deaeration, mixing and carbonation process
FBPBEV2002	Manufacture roast and ground coffee
FBPBEV2003	Operate an ice manufacturing process

Confectionery

FBPCON2001	Examine raw ingredients used in confectionery
FBPCON2002	Operate a boiled confectionery process
FBPCON2003	Operate a chocolate conching process
FBPCON2004	Operate a chocolate depositing or moulding process
FBPCON2005	Operate a confectionery depositing process
FBPCON2006	Operate a granulation and compression process
FBPCON2007	Operate a panning process
FBPCON2008	Operate a chocolate refining process
FBPCON2009	Operate a starch moulding process

Dairy processing

FBPDPR2001	Operate a butter churning process
FBPDPR2002 *	Operate a butter oil process
FBPDPR2003	Operate a curd production and cutting process
FBPDPR2004	Operate a cooling and hardening process
FBPDPR2005	Operate a cheese pressing and moulding process
FBPDPR2006	Operate a fermentation process

Fruit and vegetables

FBPFAV2001	Apply hydro-cooling process to fresh produce

Grain processing

AHCBAC204	Prepare grain storages
FBPGRA2001	Operate a liquid, mash or block stockfeed process
FBPGRA2002	Recognise mill operations and technologies
FBPGRA2003	Operate a grain conditioning process
FBPGRA2004	Operate a grain cleaning process
FBPGRA2005	Operate a purification process
FBPGRA2006	Operate a scalping and grading process
FBPGRA2007	Operate a scratch and sizing process
FBPGRA2008	Operate a break roll process
FBPGRA2009	Operate a pelleting process
FBPGRA2010	Handle grain in a storage area
FBPGRA2011 *	Receive grain for malting

FBPGRA2012 *	Prepare malted grain
FBPGRA2013	Blend and dispatch malt
TLIJ2004	Implement grain monitoring measures

Grocery products and supplies

FBPGPS2001	Operate a bleaching process
FBPGPS2002	Operate a complecting process
FBPGPS2003	Operate a deodorising process
FBPGPS2004	Operate a flake preparation process
FBPGPS2005	Operate a fractionation process
FBPGPS2006	Operate a hydrogenation process
FBPGPS2007	Operate an interesterification process
FBPGPS2008	Operate a neutralisation process
FBPGPS2009	Operate a soap splitting process
FBPGPS2010	Operate a winterisation process
FBPGPS2011	Operate a creamed honey manufacture process

Poultry

AMPA2006	Apply animal welfare and handling requirements
AMPA2174	Clean after operations - boning room
AMPP201	Operate a poultry dicing, stripping or mincing process
AMPP202	Operate a poultry evisceration process
AMPP203	Grade poultry carcass
AMPP204	Harvest edible poultry offal
AMPP205	Operate a poultry marinade injecting process

AMPP206	Operate a poultry washing and chilling process
AMPP207	Operate the bird receival and hanging process
AMPP208	Operate a poultry stunning, killing and defeathering process
FBPEGG2001	Work on an egg grading floor
FBPEGG2002 *	Operate egg grading and packing floor equipment

Cross sector units

AMPX207	Vacuum pack product
AMPX209	Sharpen knives
FBPOPR2001	Work effectively in the food processing industry
FBPOPR2002	Inspect and sort materials and product
FBPOPR2003	Prepare and monitor beer yeast propagation processes
FBPOPR2004	Operate a beer packaging process
FBPOPR2005	Operate a beer filling process
FBPOPR2006	Operate a bulk dry goods transfer process
FBPOPR2007	Work in a freezer storage area
FBPOPR2008	Operate a bulk liquid transfer process
FBPOPR2009	Load and unload tankers
FBPOPR2010	Work with temperature controlled stock
FBPOPR2011	Identify key stages and beer production equipment in a brewery
FBPOPR2012	Maintain food safety when loading, unloading and transporting food
FBPOPR2013 *	Operate a bright beer tank process

FBPOPR2014	Participate in sensory analyses
FBPOPR2015 *	Operate a beer filtration process
FBPOPR2016 *	Operate a beer maturation process
FBPOPR2017	Operate a blending, sieving and bagging process
FBPOPR2018	Operate a case packing process
FBPOPR2019	Fill and close product in cans
FBPOPR2020	Operate a form, fill and seal process
FBPOPR2021	Operate a fill and seal process
FBPOPR2022	Operate a high speed wrapping process
FBPOPR2023	Operate a packaging process
FBPOPR2025	Manufacture extruded and toasted products
FBPOPR2026	Operate a forming or shaping process
FBPOPR2027	Dispense non-bulk ingredients
FBPOPR2028	Operate a mixing or blending process
FBPOPR2029	Operate a baking process
FBPOPR2030 *	Operate a brewery fermentation process
FBPOPR2031	Operate a coating application process
FBPOPR2033	Operate a depositing process
FBPOPR2034	Operate an evaporation process
FBPOPR2035	Operate an enrobing process
FBPOPR2036	Operate an extrusion process
FBPOPR2037	Operate a filtration process
FBPOPR2038	Operate a grinding process

FBPOPR2039	Operate a frying process
FBPOPR2040	Operate a heat treatment process
FBPOPR2041	Operate a mixing or blending and cooking process
FBPOPR2042	Operate a drying process
FBPOPR2043	Operate an homogenising process
FBPOPR2044	Operate a retort process
FBPOPR2045	Operate pumping equipment
FBPOPR2046	Operate a production process
FBPOPR2047	Operate a portion saw
FBPOPR2048	Pre-process raw materials
FBPOPR2049	Operate a reduction process
FBPOPR2050	Operate a separation process
FBPOPR2051	Operate a spreads production process
FBPOPR2052	Operate a chocolate tempering process
FBPOPR2053	Operate a washing and drying process
FBPOPR2054	Operate a water purification process
FBPOPR2056	Operate a freezing process
FBPOPR2057	Operate a membrane process
FBPOPR2058	Operate a holding and storage process
FBPOPR2059	Operate a continuous freezing process
FBPOPR2060	Operate an automated cutting process
FBPOPR2061 *	Operate a wort production process
FDFSUG222A	Operate a waste water treatment system
FDFOP1003A	Carry out manual handling tasks

FDFOP2003A	Clean equipment in place
FDFOP2004A	Clean and sanitise equipment
FDFOP2005A	Work in a socially diverse environment
FDFOP2011A	Conduct routine maintenance
FDFOP2013A	Apply sampling procedures
FDFOP2015A *	Apply principles of statistical process control
FDFOP2016A	Work in a food handling area for non-food handlers
FDFOP2030A	Operate a process control interface
FDFOP2032A *	Work in a clean room environment
FDFOP2061A	Use numerical applications in the workplace
FDFPPL2001 A	Participate in work teams and groups
MSL973001	Perform basic tests
PMBPROD21 1	Operate blow moulding equipment
PMBPROD27 0	Operate injection blow moulding equipment
TLIA2009	Complete and check import/export documentation
TLIA2014	Use product knowledge to complete work operations
TLIA2021	Despatch stock
TLIA4025	Regulate temperature controlled stock
TLID2003	Handle dangerous goods/hazardous substances
TLID2004	Load and unload goods/cargo
TLID2010	Operate a forklift
TLIK2010	Use infotechnology devices in the workplace

Group C

BSBITU201	Produce simple word processed documents
BSBITU202	Create and use spreadsheets
BSBWOR204	Use business technology
FDFSUG218A	Operate a boiler - basic
HLTAID002 ^ HLTAID010	Provide basic emergency life support Provide basic emergency life support (must be delivered from 1 July 2022)
MSS402001	Apply competitive systems and practices
MSS402002	Sustain process improvements
MSS402010	Manage the impact of change on own work
MSS402021	Apply Just in Time procedures
MSS402030	Apply cost factors to work practices
MSS402031	Interpret product costs in terms of customer requirements
MSS402040	Apply 5S procedures
MSS402050	Monitor process capability
MSS402051	Apply quality standards
MSS402060	Use planning software systems in operations
MSS402061	Use SCADA systems in operations
MSS402080	Undertake root cause analysis
MSS402081	Contribute to the application of a proactive maintenance strategy
SIRRMER001	Produce visual merchandise displays
SIRRRTF001	Balance and secure point-of-sale terminal
SIRXPDK001	Advise on products and services

SIRXRSK001	Identify and respond to security risks
SITHFAB005*	Prepare and serve espresso coffee

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPDPR2002 Operate a butter oil process	FBPOPR2043 Operate an homogenising process
FBPEGG2002 Operate egg grading and packing floor equipment	FBPEGG2001 Work on an egg grading floor
FBPGRA2011 Receive grain for malting	FBPGRA2010 Handle grain in a storage area
FBPGRA2012 Prepare malted grain	FBPGRA2010 Handle grain in a storage area
FBPOPR2013 Operate a bright beer tank process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2015 Operate a beer filtration process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2016 Operate a beer maturation process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2030 Operate a brewery fermentation process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2061 Operate a wort production process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FDFOP2015A Apply principles of statistical process control	FDFOP2061A Use numerical applications in the workplace
FDFOP2032A Work in a clean room environment	FDFFS200A1 Implement the food safety program and procedures OR FDFPH2001A Apply Good Manufacturing Practice procedures

SITHFAB005 Prepare and serve espresso coffee	SITXFSA001 Use hygienic practices for food safety

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP20117 Certificate II in Food Processing	FDF20111 Certificate II in Food Processing	Updated to meet Standards for Training Packages Packaging rules clarified to reflect delivery of this qualification for processing of food for non-human and human consumption Imported units updated or deleted	Equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP20217 Certificate II in Baking

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge of a baker's assistant working in a commercial baking environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

^ From 1 July 2022 the elective unit HLTAID003 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID011 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 11 units of competency:
 - 7 core units plus
 - 4 elective units.

Elective units must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome.

The electives are to be chosen as follows:

- 1 from the units listed in Group A
- 2 from the remaining units listed in Group A or units listed in Group B

- 1 from the remaining units listed in Group A, or units listed in Group B, or any currently endorsed Training Package or accredited course that is packaged at a Certificate II or III level.

Core Units

FBPRBK2002	Use food preparation equipment to prepare fillings
FBPRBK2005	Maintain ingredient stores
FBPRBK3005	Produce basic bread products
FDFFS2001A	Implement the food safety program and procedures
FDFOHS2001A	Participate in OHS processes
FDFOP2061A	Use numerical applications in the workplace
FDFOP2064A	Provide and apply workplace information

Elective Units

Group A

FBPRBK3002	Produce non laminated pastry products
FBPRBK3008	Produce sponge cake products
FBPRBK3014	Produce sweet yeast products

Group B

FBPRBK3009	Produce biscuit and cookie products
FDFOP2005A	Work in a socially diverse environment
HLTAID003 ^ HLTAID011	Provide first aid Provide First Aid (must be delivered from 1 July 2022)
SIRRMER002	Merchandise food products
SIRXPDK001	Advise on products and services
SIRXSLS001	Sell to the retail customer

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP20217 Certificate II in Baking	FDF20510 Certificate II in Retail Baking Assistance	Redesigned. Units added and removed from the core and electives	No equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP20317 Certificate II in Food Processing (Sales)

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge for workers assisting with sales within a food manufacturing or retail food processing workplace that involves routine work with some basic problem solving in a supervised environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this qualification at the time of publication.

^ **From 1 July 2022 the elective unit HLTAID002 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID010** - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 13 units of competency:
 - 5 core units plus
 - 8 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 1 must be selected from Group A. If this qualification is to be applied in a work environment where food is processed for non-human consumption, such as pet food and stock feed or other situations where human food safety skills are not required, FBPOPR2032 Apply work procedures to maintain integrity of product should be selected.
- 2 must be selected from Group B
- 2 must be selected from Group C
- 3 may be selected from the remaining units in Groups B, C or D, or any currently endorsed Training Package or accredited course packaged at Certificate I (maximum 1 unit), Certificate II or Certificate III (maximum 1 unit) levels.

Core Units

FDFOHS2001A	Participate in OHS processes
FDFOP2061A	Use numerical applications in the workplace
FDFOP2063A	Apply quality systems and procedures
FDFOP2064A	Provide and apply workplace information
MSMENV272	Participate in environmentally sustainable work practices

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

FBPOPR2032	Apply work procedures to maintain integrity of product
FDFFS2001A	Implement the food safety program and procedures

Group B

SIRRMER001	Produce visual merchandise displays
SIRRRTF001	Balance and secure point-of-sale terminal
SIRXPDK001	Advise on products and services
SIRXRSK001	Identify and respond to security risks

Group C - Sector Specialist Units**Baking**

FBPOPR2024	Operate a cooling, slicing and wrapping process
FBPOPR2055	Freeze dough
FBPPBK2001	Operate a cooling and slicing process
FBPPBK2002	Operate a pastry forming and filling process
FBPPBK2003	Manufacture rye crisp breads
FBPPBK2004	Manufacture wafer products
FBPPBK2005	Operate a doughnut making process
FBPPBK2006	Operate a griddle production process
FBPPBK2007	Operate a pastry production process

Beverages

FBPBEV2001	Operate a deaeration, mixing and carbonation process
FBPBEV2002	Manufacture roast and ground coffee
FBPBEV2003	Operate an ice manufacturing process

Confectionery

FBPCON2001	Examine raw ingredients used in confectionery
FBPCON2002	Operate a boiled confectionery process
FBPCON2003	Operate a chocolate conching process
FBPCON2004	Operate a chocolate depositing or moulding process
FBPCON2005	Operate a confectionery depositing process
FBPCON2006	Operate a granulation and compression process
FBPCON2007	Operate a panning process

FBPCON2008	Operate a chocolate refining process
FBPCON2009	Operate a starch moulding process

Dairy processing

FBPDPR2001	Operate a butter churning process
FBPDPR2002 *	Operate a butter oil process
FBPDPR2003	Operate a curd production and cutting process
FBPDPR2004	Operate a cooling and hardening process
FBPDPR2005	Operate a cheese pressing and moulding process
FBPDPR2006	Operate a fermentation process

Fruit and vegetables

FBPFAV2001	Apply hydro-cooling process to fresh produce

Grain processing

AHCBAC204	Prepare grain storages
FBPGRA2001	Operate a liquid, mash or block stockfeed process
FBPGRA2002	Recognise mill operations and technologies
FBPGRA2003	Operate a grain conditioning process
FBPGRA2004	Operate a grain cleaning process
FBPGRA2005	Operate a purification process
FBPGRA2006	Operate a scalping and grading process
FBPGRA2007	Operate a scratch and sizing process
FBPGRA2008	Operate a break roll process
FBPGRA2009	Operate a pelleting process

FBPGRA2010	Handle grain in a storage area
TLIJ2003	Apply grain protection measures
TLIJ2004	Implement grain monitoring measures

Grocery products and supplies

FBPGPS2001	Operate a bleaching process
FBPGPS2002	Operate a complecting process
FBPGPS2003	Operate a deodorising process
FBPGPS2004	Operate a flake preparation process
FBPGPS2005	Operate a fractionation process
FBPGPS2006	Operate a hydrogenation process
FBPGPS2007	Operate an interesterification process
FBPGPS2008	Operate a neutralisation process
FBPGPS2009	Operate a soap splitting process
FBPGPS2010	Operate a winterisation process
FBPGPS2011	Operate a creamed honey manufacture process

Poultry

AMPA2006	Apply animal welfare and handling requirements
AMPA2174	Clean after operations - boning room
AMPP201	Operate a poultry dicing, stripping or mincing process
AMPP202	Operate a poultry evisceration process
AMPP203	Grade poultry carcass
AMPP204	Harvest edible poultry offal
AMPP205	Operate a poultry marinade injecting process
AMPP206	Operate a poultry washing and chilling process

AMPP207	Operate the bird receival and hanging process
AMPP208	Operate a poultry stunning, killing and defeathering process
FBPEGG2001	Work on an egg grading floor
FBPEGG2002 *	Operate egg grading and packing floor equipment

Cross sector

AHCWRK308	Handle bulk materials in storage area
AMPX207	Vacuum pack product
AMPX209	Sharpen knives
FBPOPR2001	Work effectively in the food processing industry
FBPOPR2002	Inspect and sort materials and product
FBPOPR2006	Operate a bulk dry goods transfer process
FBPOPR2007	Work in a freezer storage area
FBPOPR2008	Operate a bulk liquid transfer process
FBPOPR2009	Load and unload tankers
FBPOPR2010	Work with temperature controlled stock
FBPOPR2012	Maintain food safety when loading, unloading and transporting food
FBPOPR2014	Participate in sensory analyses
FBPOPR2017	Operate a blending, sieving and bagging process
FBPOPR2018	Operate a case packing process
FBPOPR2019	Fill and close product in cans
FBPOPR2020	Operate a form, fill and seal process
FBPOPR2021	Operate a fill and seal process
FBPOPR2022	Operate a high speed wrapping process

FBPOPR2023	Operate a packaging process
FBPOPR2025	Manufacture extruded and toasted products
FBPOPR2026	Operate a forming or shaping process
FBPOPR2027	Dispense non-bulk ingredients
FBPOPR2028	Operate a mixing or blending process
FBPOPR2029	Operate a baking process
FBPOPR2031	Operate a coating application process
FBPOPR2033	Operate a depositing process
FBPOPR2034	Operate an evaporation process
FBPOPR2035	Operate an enrobing process
FBPOPR2036	Operate an extrusion process
FBPOPR2037	Operate a filtration process
FBPOPR2038	Operate a grinding process
FBPOPR2039	Operate a frying process
FBPOPR2040	Operate a heat treatment process
FBPOPR2041	Operate a mixing or blending and cooking process
FBPOPR2042	Operate a drying process
FBPOPR2043	Operate an homogenising process
FBPOPR2044	Operate a retort process
FBPOPR2045	Operate pumping equipment
FBPOPR2046	Operate a production process
FBPOPR2047	Operate a portion saw
FBPOPR2048	Pre-process raw materials
FBPOPR2049	Operate a reduction process
FBPOPR2050	Operate a separation process

FBPOPR2051	Operate a spreads production process
FBPOPR2052	Operate a chocolate tempering process
FBPOPR2053	Operate a washing and drying process
FBPOPR2054	Operate a water purification process
FBPOPR2056	Operate a freezing process
FBPOPR2057	Operate a membrane process
FBPOPR2058	Operate a holding and storage process
FBPOPR2059	Operate a continuous freezing process
FBPOPR2060	Operate an automated cutting process
FDFSUG218A	Operate a boiler - basic
FDFSUG222A	Operate a waste water treatment system
FDFOP2003A	Clean equipment in place
FDFOP2004A	Clean and sanitise equipment
FDFOP2005A	Work in a socially diverse environment
FDFOP2011A	Conduct routine maintenance
FDFOP2013A	Apply sampling procedures
FDFOP2016A	Work in a food handling area for non-food handlers
FDFOP2030A	Operate a process control interface
FDFOP2032A *	Work in a clean room environment
MSL973001	Perform basic tests
PMBPROD21 1	Operate blow moulding equipment
PMBPROD27 0	Operate injection blow moulding equipment
TLIA2009	Complete and check import/export documentation

TLIA2021	Despatch stock
TLIA4025	Regulate temperature controlled stock
TLID2003	Handle dangerous goods/hazardous substances
TLID2004	Load and unload goods/cargo

Group D

BSBITU201	Produce simple word processed documents
BSBITU202	Create and use spreadsheets
BSBWOR204	Use business technology
FDFOP1003A	Carry out manual handling tasks
FDFOP2015A*	Apply principles of statistical process control
FDFPPL2001A	Participate in work teams and groups
HLTAID002 ^ HLTAID010	Provide basic emergency life support Provide basic emergency life support (must be delivered from 1 July 2022)
MSS402001	Apply competitive systems and practices
MSS402002	Sustain process improvements
MSS402010	Manage the impact of change on own work
MSS402021	Apply Just in Time procedures
MSS402030	Apply cost factors to work practices
MSS402031	Interpret product costs in terms of customer requirements
MSS402040	Apply 5S procedures
MSS402050	Monitor process capability
MSS402051	Apply quality standards
MSS402060	Use planning software systems in operations

MSS402061	Use SCADA systems in operations
MSS402080	Undertake root cause analysis
MSS402081	Contribute to the application of a proactive maintenance strategy
SITHFAB005*	Prepare and serve espresso coffee
TLIA2014	Use product knowledge to complete work operations
TLID2010	Operate a forklift
TLIK2010	Use infotechnology devices in the workplace

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPDPR2002 Operate a butter oil process	FBPOPR2043 Operate an homogenising process
FBPEGG2002 Operate egg grading and packing floor equipment	FBPEGG2001 Work on an egg grading floor
FDFOP2015A Apply principles of statistical process control	FDFOP2061A Use numerical applications in the workplace
FDFOP2032A Work in a clean room environment	FDFFS2001A Implement the food safety program and procedures OR FDFPH2001A Apply Good Manufacturing Practice procedures
SITHFAB005 Prepare and serve espresso coffee	SITXFSA001 Use hygienic practices for food safety

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP20317	FDF20911	Updated to meet	Equivalent qualification

Code and title current version	Code and title previous version	Comments	Equivalence status
Certificate II in Food Processing (Sales)	Certificate II in Food Processing (Sales)	Standards for Training Packages Packaging rules clarified to reflect delivery of this qualification for processing of food for non-human and human consumption Imported units updated or deleted	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30117 Certificate III in Food Processing

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge for food processing workers employed in the following sectors:

- grain processing (including stock feed, animal feeds, milling wheat, barley, oats and flour milling)
- baking (including large scale production of cakes, pastry, bread, biscuits and plant baking)
- retail baking
- beverages (including juices, soft drinks, cordials, aerated and still waters, energy drinks and other modified beverages, such as vitamin and antioxidant beverages, coffee, tea and ice)
- confectionery
- dairy processing
- fruit and vegetables
- grocery products and supplies (including honey, jams, spreads, sauces, dressings, condiments, spices, edible oils and fats and pasta)
- poultry.

This qualification is designed for production related roles that require application of industry specific skills and knowledge across a range of processes, including some technical and problem solving ability. It caters for multi-skilled outcomes and roles that include team leader functions within the production environment. All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this qualification at the time of publication.

^ **From 1 July 2022 the elective unit HLTAID003 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID011** - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 17 units of competency:
 - 5 core units plus
 - 12 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives must include a minimum of 6 units beginning with the code FDF or FBP, and are to be chosen as follows:

- 1 must be selected from Group A
- 6 must be selected from Group B
- 5 elective units may be selected from:
 - Groups A, B or C
 - this Training Package or any other currently endorsed Training Package or accredited course.

Core Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

FDFFS2001A	Implement the food safety program and procedures
FDFFS3001A*	Monitor the implementation of quality and food safety programs
FDFOHS3001A	Contribute to OHS processes
FDFOP2064A	Provide and apply workplace information
MSMENV272	Participate in environmentally sustainable work practices

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

FDFOP3003A	Operate interrelated processes in a production system
FDFOP3004A	Operate interrelated processes in a packaging system

Group B – Sector specialist and cross sector units

AHCPHT401	Assess olive oil for style and quality
AMPP301	Operate a poultry carcase delivery system
AMPP302	Debone and fillet poultry product (manually)
FBPCHE3001	Conduct cheese making operations
FBPCHE3002	Carry out processes for a range of artisan cheeses
FBPFAV3001	Conduct chemical wash for fresh produce
FBPFAV3002	Program fresh produce grading equipment
FBPGRA2011*	Receive grain for malting
FBPGRA2012*	Prepare malted grain
FBPGRA2013	Blend and dispatch malt
FBPGRA3001	Work with micronutrients or additions in stockfeed manufacturing processes
FBPGRA3002	Apply knowledge of animal nutrition principles to stockfeed product
FBPGRA3003	Lead flour milling shift operations
FBPGRA3004	Control mill processes and performance
FBPOPR2003	Prepare and monitor beer yeast propagation processes
FBPOPR2004	Operate a beer packaging process
FBPOPR2005	Operate a beer filling process

FBPOPR2011	Identify key stages and beer production equipment in a brewery
FBPOPR2013*	Operate a bright beer tank process
FBPOPR2015*	Operate a beer filtration process
FBPOPR2016*	Operate a beer maturation process
FBPOPR2030*	Operate a brewery fermentation process
FBPOPR2061*	Operate a wort production process
FBPOPR3001*	Control contaminants and allergens in the workplace
FBPOPR3002*	Prepare food products using basic cooking methods
FBPOPR3003	Identify cultural, religious and dietary considerations for food production

Cross sector units

BSBSMB405	Monitor and manage small business operations
BSBSMB407	Manage a small team
FBPPPL3001	Support and mentor individuals and groups
FBPPPL3002	Establish compliance requirements for work area
FDFOP2061A	Use numerical applications in the workplace
FDFOP3002A	Set up a production or packaging line for operation
FDFPPL3001A	Participate in improvement processes
FDFPPL3002A	Report on workplace performance
FDFPPL3004A	Lead work teams and groups
FDFPPL3005A *	Participate in an audit process
FDFTEC3001A *	Participate in a HACCP team
FDFTEC3002A	Implement the pest prevention program

FDFTEC3003A	Apply raw materials, ingredient and process knowledge to production problems
MEM13003B	Work safely with industrial chemicals and materials
MSL973001	Perform basic tests
MSMENV472	Implement and monitor environmentally sustainable work practices
MSMSUP303	Identify equipment faults
MSMSUP330	Develop and adjust a production schedule
MSS403011	Facilitate implementation of competitive systems and practices
MSS403013	Lead team culture improvement
MSTGN3007	Monitor and operate trade waste process
SIRRINV002	Control stock
SIRXRSK002	Maintain store security
TLIA3015	Complete receipt/despatch documentation
TLIA3016	Use inventory systems to organise stock control
TLIA3018	Organise despatch operations
TLIA3019	Organise receipt operations
TLIA3026	Monitor storage facilities
TLIA3038	Control and order stock
TLIA3039	Receive and store stock

Group C

BSBCUS301	Deliver and monitor a service to customers
BSBSMB301	Investigate micro business opportunities
BSBSMB401	Establish legal and risk management requirements of small business

BSBSMB402	Plan small business finances
BSBSMB403	Market the small business
BSBSMB404	Undertake small business planning
BSBSMB406	Manage small business finances
BSBWRT301	Write simple documents
FDFOHS2001A	Participate in OHS processes
FDFOP2063A	Apply quality systems and procedures
HLTAID003 ^ HLTAID011	Apply first aid Provide First Aid (must be delivered from 1 July 2022)
MEM09002B	Interpret technical drawing
MEM30011A	Set up basic pneumatic circuits
MSL922001	Record and present data
MSMPER300*	Issue work permits
MSMSUP310	Contribute to the development of workplace documentation
MSMSUP390	Use structured problem-solving tools
MSMSUP405	Identify problems in fluid power system
MSMSUP406	Identify faults in electronic control
MSS402001	Apply competitive systems and practices
MSS402002	Sustain process improvements
MSS402010	Manage the impact of change on own work
MSS402021	Apply Just in Time procedures
MSS402030	Apply cost factors to work practices
MSS402031	Interpret product costs in terms of customer requirements
MSS402040	Apply 5S procedures

MSS402050	Monitor process capability
MSS402051	Apply quality standards
MSS402060	Use planning software systems in operations
MSS402061	Use SCADA systems in operations
MSS402080	Undertake root cause analysis
MSS402081	Contribute to the application of a proactive maintenance strategy
MSS403002	Ensure process improvements are sustained
MSS403010	Facilitate change in an organisation implementing competitive systems and practices
MSS403021	Facilitate a Just in Time system
MSS403023	Monitor a levelled pull system of operations
MSS403040	Facilitate and improve implementation of 5S
MSS403041	Facilitate breakthrough improvements
MSS403051	Mistake proof an operational process
MSS404050*	Undertake process capability improvements
MSS404052	Apply statistics to operational processes
MSS404060	Facilitate the use of planning software systems in a work area or team
MSS404082	Assist in implementing a proactive maintenance strategy
MSS404083	Support proactive maintenance
TAEASS401	Plan assessment activities and processes
TAEASS402	Assess competence
TAEASS403	Participate in assessment validation
TAEDEL301	Provide work skill instruction

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPGRA2011 Receive grain for malting	FBPGRA2010 Handle grain in a storage area
FBPGRA2012 Prepare malted grain	FBPGRA2010 Handle grain in a storage area
FBPOPR2013 Operate a bright beer tank process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2015 Operate a beer filtration process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2016 Operate a beer maturation process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2030 Operate a brewery fermentation process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR2061 Operate a wort production process	FBPOPR2011 Identify key stages and beer production equipment in a brewery
FBPOPR3001 Control contaminants and allergens in the workplace	FDFFS2001A Implement the food safety program and procedures
FBPOPR3002 Prepare food products using basic cooking methods	FDFFS2001A Implement the food safety program and procedures
FDFFS3001A Monitor the implementation of quality and food safety programs	FDFFS2001A Implement the food safety program and procedures
FDFPPL3005A Participate in an audit process	FDFOHS2001A Participate in OHS processes FDFOP2063A Apply quality systems and procedures MSMENV272B Participate in environmentally sustainable work practices
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures
MSMPER300 Issue work permits	MSMWHS201 Conduct hazard analysis
MSS404050 Undertake process capability	MSS404052 Apply statistics to operational processes

improvements	

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30117 Certificate III in Food Processing	FDF30111 Certificate III in Food Processing	Updated to meet Standards for Training Packages Packaging rules clarified Imported units updated or deleted	Equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30217 Certificate III in Plant Baking

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge for workers in a production bakery, where large scale production and packaging of bread and other baked products is undertaken.

The qualification is designed for production related roles that require application of specific plant baking skills and knowledge across a range of processes, including some technical and problem solving ability. It caters for multi-skilled outcomes and roles that include team leader functions within the production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this qualification at the time of publication.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 17 units of competency:
 - 8 core units plus
 - 9 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualification Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 4 must be selected from Group A
- 5 may be selected from:

- Groups A or B
- elsewhere in this training package, any other currently endorsed training package or accredited course packaged at Certificate II (maximum 2 units), Certificate III or Certificate IV (maximum of 3 units) levels.

Core Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

FBPPBK3001	Operate a dough mixing process
FBPPBK3002	Operate a final proof and baking process
FBPPBK3003	Operate a dough make up process
FDFFS2001A	Implement the food safety program and procedures
FDFFS3001A*	Monitor the implementation of quality and food safety programs
FDFOHS3001A	Contribute to OHS processes
FDFOP2064A	Provide and apply workplace information
MSMENV272	Participate in environmentally sustainable work practices

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

BSBSMB405	Monitor and manage small business operations
BSBSMB407	Manage a small team
FBPOPR3001*	Control contaminants and allergens in the workplace
FBPPPL3001	Support and mentor individuals and groups
FBPPPL3002	Establish compliance requirements for work area

FDFOP2061A	Use numerical applications in the workplace
FDFOP3002A	Set up a production or packaging line for operation
FDFOP3003A	Operate interrelated processes in a production system
FDFOP3004A	Operate interrelated processes in a packaging system
FDFPPL3001A	Participate in improvement processes
FDFPPL3002A	Report on workplace performance
FDFPPL3004A	Lead work teams and groups
FDFPPL3005A*	Participate in an audit process
FDFTEC3001A*	Participate in a HACCP team
FDFTEC3002A	Implement the pest prevention program
FDFTEC3003A	Apply raw materials, ingredient and process knowledge to production problems
MEM13003B	Work safely with industrial chemicals and materials
MSL973001	Perform basic tests
MSMENV472	Implement and monitor environmentally sustainable work practices
MSMSUP303	Identify equipment faults
MSMSUP330	Develop and adjust a production schedule
MSS403011	Facilitate implementation of competitive systems and practices
MSS403013	Lead team culture improvement
MSTGN3007	Monitor and operate trade waste
SIRRINV002	Control stock

SIRXRSK002	Maintain store security
TLIA3015	Complete receiptal/despatch documentation
TLIA3016	Use inventory systems to organise stock control
TLIA3018	Organise despatch operations
TLIA3019	Organise receiptal operations
TLIA3026	Monitor storage facilities
TLIA3038	Control and order stock
TLIA3039	Receive and store stock

Group A

BSBCUS301	Deliver and monitor a service to customers
BSBSMB301	Investigate micro business opportunities
BSBSMB401	Establish legal and risk management requirements of small business
BSBSMB402	Plan small business finances
BSBSMB403	Market the small business
BSBSMB404	Undertake small business planning
BSBSMB406	Manage small business finances
BSBWRT301	Write simple documents
FDFOHS2001 A	Participate in OHS processes
FDFOP2063A	Apply quality systems and procedures
HLTAID003	Apply first aid
MSL922001	Record and present data
MSMPER300*	Issue work permits

MSMSUP310	Contribute to development of plant documentation
MSMSUP390	Use structured problem-solving tools
MSMSUP405	Identify problems in fluid power system
MSMSUP406	Identify problems in electronic control systems
MSS402001	Apply competitive systems and practices
MSS402002	Sustain process improvements
MSS402010	Manage the impact of change on own work
MSS402021	Apply Just in Time procedures
MSS402030	Apply cost factors to work practices
MSS402031	Interpret product costs in terms of customer requirements
MSS402040	Apply 5S procedures
MSS402050	Monitor process capability
MSS402051	Apply quality standards
MSS402060	Use planning software systems in operations
MSS402061	Use SCADA systems in operations
MSS402080	Undertake root cause analysis
MSS402081	Contribute to the application of a proactive maintenance strategy
MSS403002	Ensure process improvements are sustained
MSS403010	Facilitate change in an organisation implementing competitive systems and practices
MSS403021	Facilitate a Just in Time system
MSS403023	Monitor a manufacturing levelled pull system of operations
MSS403040	Facilitate and improve implementation of 5S
MSS403041	Facilitate breakthrough improvements

MSS403051	Mistake proof an operational process
MSS404050	Undertake process capability improvements
MSS404052	Apply statistics to operational processes
MSS404060	Facilitate the use planning software systems in a work area or team

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPOPR3001 Control contaminants and allergens in the workplace	FDFFS2001 Implement the food safety program and procedures
FDFFS3001A Monitor the implementation of quality and food safety programs	FDFFS2001 Implement the food safety program and procedures
FDFPPL3005A Participate in an audit process	FDFOHS2001A Participate in OHS processes FDFOP2063A Apply quality systems and procedures MSMENV272B Participate in environmentally sustainable work practices
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures
MSMPER300 Issue work permits	MSMWHS201 Conduct hazard analysis

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30217 Certificate III in Plant Baking	FDF30310 Certificate III in Plant Baking	Updated to meet Standards for Training Packages	Equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30317 Certificate III in Cake and Pastry

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge of a pastry cook who bakes cake, pastry and biscuit products working in a commercial baking environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

^ From 1 July 2022 the elective unit HLTAID003 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID011 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 15 units of competency:
 - 11 core units plus
 - 4 elective units.

Elective units must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 2 must be from those units listed in Group A and an additional 2 may be chosen from Group A
- up to 1 from those units listed in Group B

- up to 2 from those units listed in Group C.

Core Units

FBPRBK2002	Use food preparation equipment to prepare fillings
FBPRBK3001	Produce laminated pastry products
FBPRBK3002	Produce non laminated pastry products
FBPRBK3008	Produce sponge cake products
FBPRBK3009	Produce biscuit and cookie products
FBPRBK3010	Produce cake and pudding products
FBPRBK3013	Schedule and produce cake and pastry production
FBPRBK3018	Produce basic artisan products
FDFFS2001A	Implement the food safety program and procedures
FDFOHS2001A	Participate in OHS processes
FDFOP2061A	Use numerical applications in the workplace

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

FBPRBK3003	Produce specialist pastry products
FBPRBK3004	Produce meringue products
FBPRBK3005	Produce basic bread products
FBPRBK4003*	Produce gateaux, tortes and entremets
SITXHRM001	Coach others in job skills

Group B

SIRRMER002	Merchandise food products
SIRXPDK001	Advise on products and services
SIRXSLS001	Sell to the retail customer

Group C

FBPOPR3002*	Prepare food products using basic cooking methods
FBPOPR3003	Identify cultural, religious and dietary considerations for food production
FBPRBK3016	Control and order bakery stock
FBPRBK4004	Develop baked products
FDFTEC3001A*	Participate in a HACCP team
HLTAID003 ^ HLTAID011	Provide first aid Provide First Aid (must be delivered from 1 July 2022)

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPRBK4003 Produce gateaux, tortes and entremets	FBPRBK3010 Produce cake and pudding products
FBPOPR3002 Prepare food products using basic cooking methods	FDFFS2001A Implement the food safety program and procedures
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30317 Certificate III in Cake and Pastry	FDF30510 Certificate III in Retail Baking (Cake and Pastry)	Redesigned. Units added and removed from the core and electives	No equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30417 Certificate III in Bread Baking

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge of a bread baker who bakes bread products working in a commercial baking environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

^ From 1 July 2022 the elective unit HLTAID003 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID011 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 14 units of competency:
 - 9 core units plus
 - 5 elective units.

Elective units must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 2 must be from those units listed in Group A and an additional 3 units may be chosen from Group A
- up to 1 from those units listed in Group B

- up to 2 from those units listed in Group C.

Core Units

FBPRBK3005	Produce basic bread products
FBPRBK3006	Produce savoury bread products
FBPRBK3007	Produce specialty flour bread products
FBPRBK3012	Schedule and produce bread production
FBPRBK3014	Produce sweet yeast products
FBPRBK3018	Produce basic artisan products
FDFFS2001A	Implement the food safety program and procedures
FDFOHS2001A	Participate in OHS processes
FDFOP2061A	Use numerical applications in the workplace

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

FBPRBK3008	Produce sponge cake products
FBPRBK3011 *	Produce frozen dough products
FBPRBK3017 *	Operate plant baking processes
FBPRBK4001 *	Produce artisan bread products
FBPRBK2002	Use food preparation equipment to prepare fillings
SITXHRM001	Coach others in job skills

Group B

SIRRMER002	Merchandise food products
SIRXPDK001	Advise on products and services
SIRXSLS001	Sell to the retail customer

Group C

FBPOPR3002*	Prepare food products using basic cooking methods
FBPOPR3003	Identify cultural, religious and dietary considerations for food production
FBPRBK3016	Control and order bakery stock
FBPRBK4004	Develop baked products
FDFTEC3001A*	Participate in a HACCP team
HLTAID003 ^ HLTAID011	Provide first aid Provide First Aid (must be delivered from 1 July 2022)

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPRBK3011 Produce frozen dough products	FBPRBK3005 Produce basic bread products
FBPRBK3017 Operate plant baking processes	FBPRBK3005 Produce basic bread products
FBPRBK4001 Produce artisan bread products	FBPRBK3005 Produce basic bread products
FBPOPR3002 Prepare food products using basic cooking methods	FDFFS2001A Implement the food safety program and procedures
FDFTEC3001A Participate in a HACCP team	FDFFS2001 Implement the food safety program and procedures
FBPRBK3011 Produce frozen dough products	FBPRBK3005 Produce basic bread products

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30417 Certificate III in Bread Baking	FDF30610 Certificate III in Retail Baking (Bread)	Redesigned. Units added and removed from the core and electives	No equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30517 Certificate III in Baking

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification describes the skills and knowledge of a baker who bakes bread, cake, pastry and biscuit products working in a commercial baking environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

^ From 1 July 2022 the elective unit HLTAID003 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID011 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 19 units of competency:
 - 15 core units plus
 - 4 elective units.

Elective units must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 2 must be from those units listed in Group A and an additional 2 may be chosen from Group A
- up to 1 from those units listed in Group B

- up to 2 from those units listed in Group C.

Core Units

FBPRBK2002	Use food preparation equipment to prepare fillings
FBPRBK3001	Produce laminated pastry products
FBPRBK3002	Produce non laminated pastry products
FBPRBK3005	Produce basic bread products
FBPRBK3006	Produce savoury bread products
FBPRBK3007	Produce specialty flour bread products
FBPRBK3008	Produce sponge cake products
FBPRBK3009	Produce biscuit and cookie products
FBPRBK3010	Produce cake and pudding products
FBPRBK3014	Produce sweet yeast products
FBPRBK3015	Schedule and produce bakery production
FBPRBK3018	Produce basic artisan products
FDFFS2001A	Implement the food safety program and procedures
FDFOHS2001A	Participate in OHS processes
FDFOP2061A	Use numerical applications in the workplace

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

FBPRBK3003	Produce specialist pastry products
FBPRBK3004	Produce meringue products
FBPRBK3011*	Produce frozen dough products

FBPRBK3017*	Operate plant baking processes
FBPRBK4001*	Produce artisan bread products
FBPRBK4003*	Produce gateaux, tortes and entremets
SITXHRM001	Coach others in job skills

Group B

SIRRMER002	Merchandise food products
SIRXPDK001	Advise on products and services
SIRXSLS001	Sell to the retail customer

Group C

FBPOPR3002*	Prepare food products using basic cooking methods
FBPOPR3003	Identify cultural, religious and dietary considerations for food production
FBPRBK3016	Control and order bakery stock
FBPRBK4004	Develop baked products
FDFTEC3001A *	Participate in a HACCP team
HLTAID003 ^ HLTAID011	Provide first aid Provide First Aid (must be delivered from 1 July 2022)

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPOPR3002 Prepare food products using basic cooking methods	FDFFS2001A Implement the food safety program and procedures
FBPRBK3011 Produce frozen	FBPRBK3005 Produce basic bread products

dough products	
FBPRBK3017 Operate plant baking processes	FBPRBK3005 Produce basic bread products
FBPRBK4001 Produce artisan bread products	FBPRBK3005 Produce basic bread products
FBPRBK4003 Produce gateaux, tortes and entremets	FBPRBK3010 Produce cake and pudding products
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30517 Certificate III in Baking	FDF30710 Certificate III in Retail Baking (Combined)	Redesigned. Units added and removed from the core and electives	No equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30617 Certificate III in Food Processing (Sales)

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This qualification covers the sales specialisations within the food processing industry and targets those workers that provide sales advice and services for food manufacturing or retail food processing contexts.

The qualification is designed for roles that require the ability to perform a range of sales activities independently and as a team member, applying food processing technical skills and knowledge and problem solving. All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this qualification at the time of publication.

^ From 1 July 2022 the elective unit HLTAID003 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID011 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 14 units of competency:
 - 6 core units plus
 - 8 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 2 must be selected from Group A
- 2 must be selected from Group B
- the remaining 4 units may be selected from:
 - Groups A, B or C
 - elsewhere in this training package, any other currently endorsed training package or accredited course at Certificate II (maximum of two units), Certificate III or Certificate IV (maximum of three units) levels.

Core Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

FDFFS2001A	Implement the food safety program and procedures
FDFFS3001A*	Monitor the implementation of quality and food safety programs
FDFOHS3001A	Contribute to OHS processes
FDFOP2061A	Use numerical applications in the workplace
FDFOP2064A	Provide and apply workplace information
MSMENV272	Participate in environmentally sustainable work practices

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

BSBCUS301	Deliver and monitor a service to customers
BSBMKG501	Identify and evaluate marketing opportunities
BSBMKG507	Interpret market trends and developments
BSBMKG514	Implement and monitor marketing activities

BSBSMB301	Investigate micro business opportunities
BSBSMB401	Establish legal and risk management requirements of small business
BSBSMB402	Plan small business finances
BSBSMB403	Market the small business
BSBSMB404	Undertake small business planning
BSBSMB405	Monitor and manage small business operations
BSBSMB406	Manage small business finances
BSBSMB407	Manage a small team
SIRRINV002	Control stock
SIRXRSK002	Maintain store security

Group B – Sector specialist and cross sector elective units

Sector specialist units

AHCPHT401	Assess olive oil for style and quality
AMPP301	Operate a poultry carcase delivery system
AMPP302	Debone and fillet poultry product (manually)
AMPR322	Prepare and produce value-added products
FBPFAV3001	Conduct chemical wash for fresh produce
FBPFAV3002	Program fresh produce grading equipment
FBPGRA3001	Work with micronutrients or additions in stockfeed manufacturing processes
FBPGRA3002	Apply knowledge of animal nutrition principles to stockfeed product
FBPOPR3001 *	Control contaminants and allergens in the work area
FBPOPR3002 *	Prepare food products using basic cooking methods

FBPOPR3003	Identify cultural, religious and dietary considerations for food production

Cross sector units

FBPPPL3001	Support and mentor individuals and groups
FBPPPL3002	Establish compliance requirements for work area
FDFOP3002A	Set up a production or packaging line for operation
FDFPPL3001 A	Participate in improvement processes
FDFPPL3002 A	Report on workplace performance
FDFPPL3004 A	Lead work teams and groups
FDFPPL3005 A*	Participate in an audit process
FDFTEC3001 A*	Participate in a HACCP team
FDFTEC3002 A	Implement the pest prevention program
FDFTEC3003 A	Apply raw materials, ingredient and process knowledge to production problems
MEM13003B	Work safely with industrial chemicals and materials
MSL973001	Perform basic tests
MSMENV472	Implement and monitor environmentally sustainable work practices
MSMSUP303	Identify equipment faults
MSMSUP330	Develop and adjust a production schedule
MSS403011	Facilitate implementation of competitive systems and practices
MSS403013	Lead team culture improvement

MSTGN3007	Monitor and operate trade waste
TLIA3015	Complete receiptal/despatch documentation
TLIA3016	Use inventory systems to organise stock control
TLIA3018	Organise despatch operations
TLIA3019	Organise receiptal operations
TLIA3026	Monitor storage facilities
TLIA3038	Control and order stock
TLIA3039	Receive and store stock

Group C

BSBWRT301	Write simple documents
FDFOHS2001 A	Participate in OHS processes
FDFOP2063A	Apply quality systems and procedures
HLTAID003 ^ HLTAID011	Apply first aid Provide First Aid (must be delivered from 1 July 2022)
MSL922001	Record and present data
MSMPER300*	Issue work permits
MSMSUP310	Contribute to the development of workplace documentation
MSMSUP390	Use structured problem-solving tools
MSMSUP405	Identify problems in fluid power system
MSMSUP406	Identify problems in electronic control
MSS402001	Apply competitive systems and practices
MSS402002	Sustain process improvements
MSS402010	Manage the impact of change on own work

MSS402021	Apply Just in Time procedures
MSS402030	Apply cost factors to work practices
MSS402031	Interpret product costs in terms of customer requirements
MSS402040	Apply 5S procedures
MSS402050	Monitor process capability
MSS402051	Apply quality standards
MSS402060	Use planning software systems in operations
MSS402061	Use SCADA systems in operations
MSS402080	Undertake root cause analysis
MSS402081	Contribute to the application of a proactive maintenance strategy
MSS403002	Ensure process improvements are sustained
MSS403010	Facilitate change in an organisation implementing competitive systems and practices
MSS403021	Facilitate a Just in Time system
MSS403023	Monitor a levelled pull system of operations
MSS403040	Facilitate and improve implementation of 5S
MSS403041	Facilitate breakthrough improvements
MSS403051	Mistake proof an operational process
MSS404050	Undertake process capability improvements
MSS404052	Apply statistics to operational processes
MSS404060	Facilitate the use of planning software systems in a work area or team
MSS404082	Assist in implementing a proactive maintenance strategy
MSS404083	Support proactive maintenance
TAEASS401	Plan assessment activities and processes

TAEASS402	Assess competence
TAEASS403	Participate in assessment validation
TAEDEL301	Provide work skill instruction

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPOPR3001 Control contaminants and allergens in the work area	FDFFS2001A Implement the food safety program and procedures
FBPOPR3002 Prepare food products using basic cooking methods	FDFFS2001A Implement the food safety program and procedures
FDFFS3001A Monitor the implementation of quality and food safety programs	FDFFS2001A Implement the food safety program and procedures
FDFPPL3005A Participate in an audit process	FDFOHS2001A Participate in OHS processes FDFOP2063A Apply quality systems and procedures MSMENV272B Participate in environmentally sustainable work practices
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures
MSMPER300 Issue work permits	MSMWHS201 Conduct hazard analysis

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30617 Certificate III in Food Processing (Sales)	FDF30910 Certificate III in Food Processing (Sales)	Updated to meet Standards for Training Packages Packaging rules clarified	Equivalent qualification

Code and title current version	Code and title previous version	Comments	Equivalence status
		Imported units updated or deleted	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP30717 Certificate III in Rice Processing

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceuticals Training Package version 1.0.

Qualification Description

The qualification provides a general vocational outcome in rice production work that enables individuals to mill process and package rice grain products, mill rice flour and manufacture rice consumer products on an industrial scale.

Individuals with this qualification perform tasks involving a broad range of skills that are applied in a wide variety of contexts, which will involve discretion and judgement in selecting and operating equipment, coordinating resources and applying contingency measures during work.

Job roles vary across different industry sectors and may include:

- Rice miller
- Rice flour miller
- Rice production worker
- Rice packaging worker
- Rice food manufacturing worker.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 15 units of competency made up of:
 - 8 core units plus
 - 7 elective units

Elective units must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- 2 must be from group A
- 3 must be from any in group B, C, D and E
- 2 from the remaining units listed in groups A, B, C, D, E or F or any currently endorsed Training Package or accredited course packaged at Certificate III or Certificate IV, with no more than 1 unit packaged at Certificate IV.

Any combination of electives that meets the packaging rules can be selected for the award of the Certificate III in Rice Processing.

Where appropriate, electives may be packaged to provide a qualification with a specialisation area as follows:

- A minimum of 3 electives from Group B must be selected for award of the *Certificate III in Rice Processing (Rice Miller)*
- A minimum of 3 electives from Group C must be selected for award of the *Certificate III in Rice Processing (Rice Flour Miller)*
- A minimum of 3 electives from Group D must be selected for award of the *Certificate III in Rice Processing (Rice Product Manufacturer)*
- A minimum of 3 electives from Group E must be selected for award of the *Certificate III in Rice Processing (Rice Receival and Storage)*

Core Units

FDFFS2001A	Implement the food safety program and procedures
FDFFS3001A*	Monitor the implementation of quality and food safety programs
FDFOHS3001A	Contribute to OHS processes
FDFOP2063A	Apply quality systems and procedures

FDFPPL3004 A	Lead work teams and groups
FDFSUG308A	Analyse and convey workplace information
FSKNUM31	Apply a wide range of mathematical calculations for work
MSL973001	Perform basic tests

Elective Units

Group A Rice Processing

FDFOP3002A	Set up a production or packaging line for operation
FDFOP3003A	Operate interrelated processes in a production system
FDFOP3004A	Operate interrelated processes in a packaging system
FDFTEC3003 A	Apply raw materials, ingredient and process knowledge to production problems

Group B Rice Miller

FBPGRA3006	Implement a paddy receival and grain cleaning process
FBPGRA3007	Implement a rice blending and cleaning process
FBPGRA3008	Implement a rice colour sorting process
FBPGRA3011	Implement a rice grading process
FBPGRA3012	Implement a rice hulling and separation process
FBPGRA3015	Implement a rice whitening process

Group C Rice Flour Miller

FBPGRA3003	Lead flour milling shift operations
FBPGRA3004	Control mill processes and performance
FBPGRA3009	Implement a rice flour break process
FBPGRA3010	Implement a rice flour grading process

FBPGRA3016	Implement a rice flour blending process

Group D Rice Product Manufacturer

FBPGRA3013	Implement a rice product manufacturing process
FBPOPR2044	Operate a retort process
FBPPBK2006	Operate a griddle production process
FBPPPL3002	Establish compliance requirements for work area
FDFBP3002A	Operate the labelling process
FDFPPL3001 A	Participate in improvement processes

Group E Rice Receival and Storage

FBPGRA3005	Conduct rice harvest receivals
FBPGRA3014	Implement a rice seed preparation and storage system
FDFTEC3002 A	Implement the pest prevention program

Group F General Electives

AHCBAC204	Prepare grain storages
FBPGRA2009	Operate a pelleting process
FBPGRA2010	Handle grain in a storage area
FBPGRA2014	Operate a rice vitamin enrichment process
FBPOPR2028	Operate a mixing or blending process
FBPOPR2036	Operate an extrusion process
FBPOPR2041	Operate a mixing or blending and cooking process
FBPOPR2042	Operate a drying process
FBPPPL4001*	Manage people in the work area

FBPPPL4002	Plan and coordinate production equipment maintenance
FBPPPL4003	Schedule and manage production
FBPPPL4004*	Optimise a work process
FDFSUG218A	Operate a boiler - basic
FDFOP2015A *	Apply principles of statistical process control
FDFOP2030A	Operate a process control interface
FDFPPL3001 A	Participate in improvement processes
FDFPPL3002 A	Report on workplace performance
FDFPPL3005 A*	Participate in an audit process
FDFTEC3001 A*	Participate in a HACCP team
FDFTEC4003 A*	Control food contamination and spoilage
FDFTEC4004 A*	Apply basic process engineering principles to food processing
FDFTEC4005 A	Apply an understanding of food additives
FDFTEC4008 A	Apply principles of food packaging
MSMENV272	Participate in environmentally sustainable work practices.
MSMPER200	Work in accordance with an issued permit
MSMPER201	Monitor and control work permits
MSMPER300*	Issue work permits
MSMSUP303	Identify equipment faults
PMASUP420	Minimise environmental impact of process

SITXHRM001	Coach others in job skills
TLIA3016	Use inventory systems to organise stock control
TLIA3038	Control and order stock
TLIA3039	Receive and store stock
TLID2003	Handle dangerous goods/hazardous substances
TLIJ2003	Apply grain protection measures
TLILIC2001	Licence to operate a forklift truck

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPPPL4001 Manage people in the work area	FBPPPL3001 Support and mentor individuals and groups
FBPPPL4004 Optimise a work process	FDFPPL3001A Participate in improvement processes
FDFFS3001A Monitor the implementation of quality and food safety programs	FDFFS2001A Implement the food safety program and procedures
FDFOP2015A Apply principles of statistical process control	FDFOP2061A Use numerical applications in the workplace
FDFPPL3005A Participate in an audit process	FDFOHS2001A Participate in OHS processes FDFOP2063A Apply quality systems and procedures MSMENV272B Participate in environmentally sustainable work practices
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures
FDFTEC4003A Control food contamination and spoilage	FDFFS3001A Monitor the implementation of quality and food safety programs*

FDFTEC4004A Apply basic process engineering principles to food processing	FDFOP2030A Operate a process control interface FDFTEC4007A Describe and analyse data using mathematical principles*
FDFTEC4007A Describe and analyse data using mathematical principles	FDFOP2015A Apply principles of statistical process control*
MSMPER300 Issue work permits	MSMWHS201 Conduct hazard analysis

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP30717 Certificate III in Rice Processing	ZRG30100 Certificate III in Rice Processing	Redesigned qualification. Units added to core and electives. Four specialist streams created.	No equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP40117 Certificate IV in Flour Milling

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

The qualification covers the skills and knowledge for mill managers and senior supervisors (above the shift miller level) who supervise operations across departments, set or participate in setting production targets and monitor key performance indicators for a flour mill. These roles require technical, leadership and business skills and knowledge to implement and manage systems and procedures to mill a wide range of flours.

It covers flour milling operations for all types of grain including wheat, oats, barley, corn, rice, sorghum, millet, rye, and non-grain flours such as peas and arrowroot for human consumption. All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety and environmental codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this qualification at the time of publication.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 22 units of competency:
 - 10 core units plus
 - 12 elective units.

Elective units must ensure the integrity of the qualification's Australian Qualifications Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives must include a minimum of 3 units beginning with the code FDF or FBP, and are to be chosen as follows:

- 6 must be selected from Group A
- 6 may be selected from:
 - the remaining units listed in Groups A or B
 - elsewhere in this Training Package packaged at Certificate III (maximum of 5 units), Certificate IV, or Diploma (maximum of 2 units)
 - any other currently endorsed training package or accredited course packaged at Certificate III (maximum of 2 units), Certificate IV (maximum of 4 units) or Diploma (maximum of 2 units).

Core Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

FBPGRA3003	Lead flour milling shift operations
FBPGRA3004	Control mill processes and performance
FBPGRA4001	Control power and automation for milling processes
FBPGRA4002	Supervise testing processes for wheat and flour
FBPGRA4003	Manage mill logistics and support services
FBPGRA4004	Establish and supervise dust control procedures in a grain processing enterprise
FDFFS2001A	Implement the food safety program and procedures
FDFFS3001A*	Monitor the implementation of quality and food safety programs
FDFOHS4002 A	Maintain OHS processes
MSMENV472	Implement and monitor environmentally sustainable work practices

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A

BSBLED401	Develop teams and individuals
BSBMGT402	Implement operational plan
BSBMGT403	Implement continuous improvement
BSBSMB407	Manage a small team
FBPPPL4001*	Manage people in the work area
FBPPPL4002	Plan and coordinate production equipment maintenance
FBPPPL4003	Schedule and manage production
FBPPPL4004*	Optimise a work process
FBPPPL4005	Manage supplier agreements and contracts
FBPPPL4006	Manage a work area within budget
FDFST4002 A	Monitor the development and implementation of a food QA system
FDFST4003 A	Apply digital technology in food processing
FDFST4005 A	Document processes and procedures for a food product
FDFST4007 A	Establish operational requirements for a food processing enterprise
FDFST4012 A	Apply water management principles to the food industry
FDFOP3003A	Operate interrelated processes in a production system
FDFOP3004A	Operate interrelated processes in a packaging system
FDFPPL3002 A	Report on workplace performance
FDFPPL3005	Participate in audit processes

A*	
FDFPPL4005 A*	Establish process capability
FDFTEC4001 A	Determine handling processes for perishable food items
FDFTEC4002 A	Manage controlled atmosphere storage
FDFTEC4003 A*	Control food contamination and spoilage
FDFTEC4004 A*	Apply basic process engineering principles to food processing
FDFTEC4005 A	Apply an understanding of food additives
FDFTEC4006 A	Apply an understanding of legal requirements of food production
FDFTEC4007 A*	Describe and analyse data using mathematical principles
FDFTEC4008 A	Apply principles of food packaging
FDFTEC4009 A	Identify the physical and chemical properties of materials, food and related products
FDFTEC4010 A*	Manage water treatment processes
FDFTEC4011 A*	Participate in product recalls
MEM09002B	Interpret technical drawing
MEM30011A	Set up basic pneumatic circuits
MSMOPS400	Optimise process/plant area
MSMOPS401	Trial new process or product
MSMSUP405	Identify problems in fluid power system
MSMSUP406	Identify problems in electronic control systems

MSS014003	Optimise sustainability of a process or plant area
MSS014004	Develop team strategies for more sustainable use of resources
MSS015005	Develop required sustainability reports
MSS024003	Apply an understanding of environmental principles to a site
MSS403001	Review competitive systems and practices
MSS403002	Ensure process improvements are sustained
MSS403011	Facilitate implementation of competitive systems and practices
MSS403030	Improve cost factors in work practices
MSS403032	Analyse manual handling processes
MSS403051	Mistake proof an operational process
MSS404050	Undertake process capability improvements
MSS404052	Apply statistics to operational processes
MSS404081	Undertake proactive maintenance analyses
MSS404082	Assist in implementing a proactive maintenance strategy
MSS404083	Support proactive maintenance
PMBTECH406	Diagnose production equipment problems

Group B

AHCBAC204	Prepare grain storages
BSBCUS501	Manage quality customer service
BSBHRM405	Support the recruitment, selection and induction of staff
BSBINN301	Promote innovation in a team environment
BSBLDR403	Lead team effectiveness

BSBMGT401	Show leadership in the workplace
BSBWOR403	Manage stress in the workplace
BSBWOR404	Develop work priorities
BSBWRT401	Write complex documents
FBPGRA2003	Operate a grain conditioning process
FBPGRA2004	Operate a grain cleaning process
FBPGRA2005	Operate a purification process
FBPGRA2006	Operate a scalping and grading process
FBPGRA2007	Operate a scratch and sizing process
FBPGRA2008	Operate a break roll process
FBPGRA2010	Handle grain in a storage area
FDFOP2030A	Operate a process control interface
FDFTEC3002 A	Implement the pest prevention program
MEM15001B	Perform basic statistical quality control
MSMSUP390	Use structured problem-solving tools
MSS402060	Use planning software systems in operations
MSS402061	Use SCADA systems in operations
MSS402080	Undertake root cause analysis
MSS403005	Facilitate use of a Balanced Scorecard for performance improvement
MSS403010	Facilitate change in an organisation implementing competitive systems and practices
MSS403013	Lead team culture improvement
MSS403021	Facilitate a Just in Time system
MSS403023	Monitor a levelled pull system of operations

MSS403040	Facilitate and improve implementation of 5S
MSS403041	Facilitate breakthrough improvements
MSS404053	Use DMAIC techniques
MSS404060	Facilitate the use of planning software systems in a work area or team
MSS404061	Facilitate the use of SCADA systems in a team or work area
RIIRIS201D	Conduct local risk control
TLIJ2004	Implement grain monitoring measures

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPPPL4001 Manage people in the work area	FBPPPL3001 Support and mentor individuals and groups
FBPPPL4004 Optimise a work process	FDFPPL3001A Participate in improvement processes
FDFFS3001A Monitor the implementation of quality and food safety programs	FDFFS2001A Implement the food safety program and procedures
FDFOP2015A Apply principles of statistical process control	FDFOP2061A Use numerical applications in the workplace
FDFPPL3005A Participate in an audit process	FDFOHS2001A Participate in OHS processes FDFOP2063A Apply quality systems and procedures MSAENV272B Participate in environmentally sustainable work practices
FDFPPL4005A Establish process capability	FDFTEC4007A Describe and analyse data using mathematical principles*
FDFTEC3001A Participate in a HACCP team	FDFFS2001A Implement the food safety program and procedures
FDFTEC4003A Control food	FDFFS3001A Monitor the implementation of quality and

contamination and spoilage	food safety programs* FDFOHS4002A Maintain OHS processes FDFTEC3001A Participate in a HACCP team*
FDFTEC4004A Apply basic process engineering principles to food processing	FDFTEC4007A Describe and analyse data using mathematical principles* FDFOP2030A Operate a process control interface
FDFTEC4007A Describe and analyse data using mathematical principles	FDFOP2015A Apply principles of statistical process control*
FDFTEC4010A Manage water treatment processes	MSAENV272B Participate in environmentally sustainable work practices
FDFTEC4011A Participate in product recalls	FDFFS3001A Monitor the implementation of quality and food safety programs*

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP40117 Certificate IV in Flour Milling	FDF41012 Certificate IV in Flour Milling	Updated to meet Standards for Training Packages Imported units updated or deleted	Equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBP40217 Certificate IV in Baking

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Qualification Description

This Qualification describes the specialist technical skills and knowledge of an advanced bread baker, advanced pastry cook or advanced baker working in a commercial baking environment. It may be packaged to reflect a specialisation in advanced bread baking skills or in advanced pastry skills, or a combination of both.

This Qualification includes technical, artisan and creative skills and knowledge required to produce bakery products, solve baking problems, and ensure that baking and business operations are implemented and maintained to optimal performance.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Entry Requirements

To commence this qualification an individual must have:

- completed a Certificate III qualification in a field of study related to commercial baking, or
- at least 3 year's full time relevant employment in a commercial baking environment.

Packaging Rules

To achieve this qualification, competency must be demonstrated in:

- 14 units of competency:
 - 7 core units plus
 - 7 elective units.

Electives must ensure the integrity of the qualification's Australian Quality Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome. The electives are to be chosen as follows:

- A minimum of 3 from Group A and B
- Up to 4 from Group C
- Up to 2 from any currently endorsed Training Package or accredited course that is packaged at a Certificate IV or Diploma level.

Any combination of electives that meets the packaging rules can be selected for the award of the Certificate IV in Baking.

Electives may be packaged to provide a qualification with a specialisation area as follows:

- A minimum of 5 electives from Group A must be selected for award of the Certificate IV in Baking (Advanced Bread)
- A minimum of 6 electives from Group B must be selected for award of the Certificate IV in Baking (Advanced Pastry)

Core Units

BSBSUS401	Implement and monitor environmentally sustainable work practices
FBPRBK3016	Control and order bakery stock
FBPRBK4004	Develop baked products
FBPRBK4006	Coordinate baking operations
FDFFS4001A	Supervise and maintain a food safety plan
FDFOHS4002 A	Maintain OHS processes
SITXHRM001	Coach others in job skills

Elective Units

An asterisk (*) next to the unit code indicates that there are prerequisite requirements which must be met when packaging the qualification. Please refer to the Prerequisite requirements table for details.

Group A Advanced Bread

FBPRBK3005	Produce basic bread products
FBPRBK3011	Produce frozen dough products
FBPRBK3017*	Operate plant baking processes
FBPRBK4001*	Produce artisan bread products
FBPRBK4002*	Develop advanced artisan bread methods
FBPRBK4007	Assess and evaluate bread products
FBPRBK4008	Apply bread baking science

Group B Advanced Pastry

FBPRBK3003	Produce specialist pastry products
FBPRBK3010	Produce cake and pudding products
FBPRBK4003*	Produce gateaux, tortes and entremets
FBPRBK4005	Apply advanced finishing techniques for specialty cakes
SITHPAT005*	Produce petit fours
SITHPAT006*	Produce desserts
SITHPAT008*	Produce chocolate confectionery
SITXFSA001	Use hygienic practices for food safety

Group C Bakery Operations

BSBCUS401	Coordinate implementation of customer service strategies
BSBFRA401	Manage compliance with franchisee obligations and legislative requirements
BSBSMB405	Monitor and manage small business operations

BSBSMB407	Manage a small team

Prerequisite requirements

Unit of competency	Prerequisite requirement
FBPRBK3017 Operate plant baking processes	FBPRBK3005 Produce basic bread products
FBPRBK4001 Produce artisan bread products	FBPRBK3005 Produce basic bread products
FBPRBK4002 Develop advanced artisan bread methods	FBPRBK4001 Produce artisan bread products
FBPRBK4003 Produce gateaux, tortes and entremets	FBPRBK3010 Produce cake and pudding products
SITHPAT005 Produce petit fours	SITXFSA001 Use hygienic practices for food safety
SITHPAT006 Produce desserts	SITXFSA001 Use hygienic practices for food safety
SITHPAT008 Produce chocolate confectionery	SITXFSA001 Use hygienic practices for food safety

Qualification Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBP40217 Certificate IV in Baking	FDF40811 Certificate IV Advanced Baking	Redesigned. Changes to core and electives units. Baking business operations stream removed.	No Equivalent qualification

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

AHCBA204 Prepare grain storages

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to safely prepare storages, surrounding areas and equipment in readiness for receiving grain at an acceptable level of hygiene. This unit applies to workers in specialist grain storages or on grain farms.

All work must be carried out to comply with workplace procedures, work health and safety and biosecurity legislation and codes, and sustainability practices.

This unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for own work. They undertake defined activities and work in a structured context.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication. However, all work in confined spaces must comply with state and federal legislation requirements.

Pre-requisite Unit

Nil.

Unit Sector

Broad acre cropping (BAC)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.

Element	Performance criteria
1. Prepare to work in bulk material storage area	1.1 Follow the work program and clarify with supervisor 1.2 Identify work health and safety hazards in grain storage and report to supervisor and implement suitable controls 1.3 Select, use and maintain suitable personal protective equipment 1.4 Select, prepare and maintain appropriate equipment and tools
2. Prepare storage area	2.1 Clean the storage site of weeds, dust and spillage appropriately 2.2 Dispose refuse appropriately 2.3 Prepare and maintain the storage site appropriately
3. Prepare storages	3.1 Clean bulk material storages appropriately of all residues 3.2 Check bulk material storages for structural safety, damage or deterioration, and repaired or reported appropriately 3.3 Prepare and erect temporary storages appropriately
4. Prepare bulk material handling machinery	4.1 Clean bulk material handling machinery appropriately to be free of contamination and residues 4.2 Assist in the adjustment and setting bulk material handling equipment appropriately 4.3 Prepare bulk material handling equipment according to manufacturer's instructions and enterprise requirements
5. Complete maintenance operation	5.1 Record workplace information 5.2 Dispose of all waste and debris according to enterprise policies and minimising the impact on the environment 5.3 Clean and store tools and equipment appropriately 5.4 Apply enterprise biosecurity policies

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCBA204A Prepare grain storages.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCBA204 Prepare grain storages

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- identify hazards and follow safe work procedures
- erect simple temporary bulk material storages
- check equipment and storage facilities, and identify current or impending faults
- perform pre-operational checks and routine safety, service and maintenance procedures on tools, equipment and machinery
- operate hand and independently powered tools and cleaning equipment to industry standards
- clean, secure and store machinery and equipment
- handle hazardous substances (fuels) safely
- read and interpret manufacturer's specifications, work and maintenance programs, and Safety Data Sheets (SDS)
- prepare the storage area for access by grain carriers
- prepare grain storages by removing all residues and checking structure
- work in confined spaces in accordance with State/Territory legislation, where required
- prepare and test grain handling machinery
- communicate with supervisor
- follow enterprise work health and safety policies in the context of own work
- follow enterprise biosecurity policies the context of own work.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- range of construction methods, potential hazards, safety and structural requirements for storage

- erection and dismantling for types of temporary storage used by organisation
- organisation and commodity quality requirements for grain storage
- grain storage hygiene requirements
- typical signs of structural damage to be documented and reported
- pre-operational and safety checks, servicing and maintenance procedures for tools and equipment
- machinery maintenance procedures and operating principles
- machinery and equipment cleaning, storage and protection methods
- appropriate action in contingency situations
- organisation requirements for protective equipment and safe practices in relation to work health and safety
- State/Territory legislation in respect to working in confined spaces
- potential hazards associated with the operation of basic tools and equipment
- regulations and codes of practice with regard to work health and safety, environment and the use and control of machinery and equipment
- personal protective clothing and equipment and when and how it should be used
- organisational recording and reporting procedures.

Assessment Conditions

Competency is to be assessed in the workplace or simulated environment that accurately reflects performance in a real workplace setting.

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

AHCPTH401 Assess olive oil for style and quality

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to assess olive oil for style and quality.

It applies to individuals who analyse information and exercise judgement to complete a range of advanced skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems. All work is carried out to comply with workplace procedures.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Production horticulture (PHT)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Establish and implement appropriate tasting protocols	1.1 Establish appropriate tasting conditions 1.2 Apply accepted industry tasting procedures 1.3 Taste oils in the order that will best show the character of each oil

Element	Performance criteria
2. Determine style and sensory quality of the olive oil	2.1 Identify and assess characteristics of the olive oil 2.2 Taste oil to assess 2.3 Smell and taste oil to assess sensory quality 2.4 Analyse and record observed defects for future action
3. Determine the analytical quality of the olive oil	3.1 Send oil samples to laboratory to test key chemical indices 3.2 Interpret key chemical indices to assess analytical quality of oil 3.3 Record for future action observed chemical indices that are beyond the normal range
4. Identify factors influencing the style and quality of the olive oil	4.1 Identify horticultural factors that may influence style and quality of the olive oil 4.2 Identify processing factors that may influence style and quality of the olive oil 4.3 Identify other factors that may influence style and quality of the olive oil
5. Implement findings of tastings and chemical analyses	5.1 Maintain records of season's tastings and chemical analyses 5.2 Evaluate horticultural and processing activities and methods in terms of modifications and improvements to be made 5.3 Adjust and document horticultural production plan for next season 5.4 Document and communicate processing requirements for next season to processing personnel

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCPHT401A Assess olive oil for style and quality.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCPHT401 Assess olive oil for style and quality

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- identify olive oil styles
- identify common olive oil defects
- modify horticultural and/or processing practices to remedy variations from desired style and quality

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices for assessing olive oil
 - cause of olive oil defects and how they can be remedied
 - horticultural and processing practices that affect olive oil style, and reasons for the effect
 - relationship between critical chemical parameters and oil style and quality

Assessment Conditions

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

AHCWRK308 Handle bulk materials in storage area

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to receive, move and sample bulk materials in a storage area.

Bulk materials are handled to industry standards and the bulk material storage program in relation to segregation and storage conditions ensuring minimum loss or damage and optimum returns.

This unit applies to individuals who work under broad direction and take responsibility for their own work. They use discretion and judgement in the selection and use of available resources.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Work (WRK)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare to work in bulk	1.1 Interpret work to be undertaken from the work program where

Element	Performance criteria
materials storage area	necessary, and confirmed with supervisor 1.2 Identify work health and safety hazards, assess risks and implement suitable control measures 1.3 Select, use and maintain suitable personal protective clothing 1.4 Select, check and maintain tools and equipment suitable for the work to be undertaken 1.5 Identify environmental implications of undertaking work in the bulk materials storage area, assess likely outcomes and responsible action taken if necessary 1.6 Maintain biosecurity protocols at all times 1.7 Identify legislative, regulatory and industry requirements 1.8 Design and implement contingency strategies
2. Sample bulk materials for testing	2.1 Take representative samples of bulk materials for testing in line with the requirements of the bulk materials storage program 2.2 Undertake sampling safely, following the prescribed guidelines for the activity 2.3 Prepare representative bulk materials samples for dispatch by clearly labelling and packaging accordingly 2.4 Dispatch samples to the analysing body
3. Move bulk materials into and out of storage	3.1 Identify bulk materials for handling and storage from written or verbal instructions 3.2 Segregate bulk materials according to type, variety and quality characteristics 3.3 Take measures to minimise insect and weed infestation and contamination during the movement of the bulk materials 3.4 Check bulk materials regularly for insect infestation and contamination during movement 3.5 Clean any storage and handling equipment that is used thoroughly after emptying, and dismantle if necessary 3.6 Select silo types and handling equipment for each bulk material type in relation to their storage characteristics and flow properties 3.7 Implement suitable measures to minimise the effect of desiccant dusts on the flow properties of bulk materials 3.8 Update and store records appropriately
4. Repair and maintain storage facility	4.1 Identify the need for repairs to the facility through observation or instruction 4.2 Conduct maintenance and repairs as required 4.3 Complete maintenance records and other appropriate information 4.4 Clean and maintain workshop and work areas 4.5 Report maintenance and repairs, damage, malfunctions or

Element	Performance criteria
	irregular performance in machinery, tools and equipment 4.6 Clean, maintain and store tools and equipment

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCWRK308A Handle bulk materials in storage area.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCWRK308 Handle bulk materials in storage area

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- check equipment and storage facilities and identify current or impending faults
- record bulk materials stocks and movements
- conduct silo readings
- identify bulk materials pests and damage
- use communication systems
- sample and conduct a simple analysis of bulk materials
- handle and manoeuvring equipment
- test bulk materials for moisture, contamination and quality
- complete pre-operational checks on basic tools and equipment
- perform routine safety, service and maintenance procedures on tools, equipment and machinery
- operate hand and independently powered tools and clean equipment to industry standards
- clean, securing and storing machinery and equipment
- perform basic trouble shooting
- recognise and rectifying minor operational faults
- handle hazardous substances (fuels) safely
- use industry standard terminology.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- the client's sampling and classification requirements
- bulk materials types and characteristics

- common bulk materials pests and problems
- legislative requirements, manufacturer's instructions and workplace procedures
- silo operations and configuration, machinery and operating practices
- organisation requirements for protective equipment and safe practices in relation to work health and safety
- organisation and industry guidelines for segregation of bulk materials quality assurance principles
- pre-operational and safety checks, servicing and maintenance procedures for tools and equipment
- potential hazards associated with the operation of basic tools and equipment
- general machine maintenance procedures
- machinery operating principles and operating methods
- machinery storage and protection methods
- environmental impacts associated with the operation of machinery and equipment
- personal protective clothing and equipment and when and how it should be used
- cleaning and storage of machinery, equipment and materials
- enterprise recording and reporting procedures.

Assessment Conditions

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

AMPA2006 Apply animal welfare and handling requirements

Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Application

This unit describes the skills and knowledge required to identify animal welfare issues and comply with the necessary requirements when handling animals. The requirements include all workplace and regulatory requirements for humane handling.

This unit is applicable to all personnel responsible for handling livestock.

All work should be carried out to comply with workplace and hygiene requirements.

This unit applies to individuals who work under general supervision, exercise limited autonomy and have some accountability for their own work.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

This unit must be delivered and assessed in the context of Australian meat processing standards and regulations, in particular legislative requirements related to animal welfare.

Pre-requisite Unit

Nil.

Unit Sector

Elements and Performance Criteria

Element	Performance criteria
Elements describe the	Performance criteria describe the performance needed to demonstrate

Element	Performance criteria
essential outcomes.	achievement of the element.
1. Identify and explain animal handling practices	1.1 Identify work instructions and work practices for the welfare and handling of animals 1.2 Identify the impact on the quality of meat of stressing and/or injuring animals 1.3 Identify defects in meat quality resulting from poor handling techniques of live animals
2. Identify and explain animal welfare requirements	2.1 Identify risks to animals being handled 2.2 Identify and explain workplace and regulatory requirements for handling animals humanely 2.3 Identify and explain relevant sections of the applicable Animal Welfare Standard and relevant legislation
3. Identify and explain workplace health and safety requirements for handling animals safely	3.1 Identify risks associated with handling animals 3.2 Identify workplace health and safety requirements associated with handling animals
4. Identify and explain livestock identification procedures	4.1 Identify individual animal identification procedures, where appropriate, according to workplace, WHS and regulatory requirements 4.2 Explain the purpose of individual mob and lot identification 4.3 Identify lots according to workplace requirements 4.4 Explain the consequences of incorrect lot identification
5. Identify and explain requirements for dealing with sick and injured stock	5.1 Explain workplace and regulatory requirements 5.2 Describe humane destruction (euthanasing) arrangements
6. Apply animal welfare and handling techniques	6.1 Handle animals in a way that complies with workplace requirements and minimises stress 6.2 Maintain flow of stock to meet processing requirements 6.3 Handle animals safely in accordance with workplace and WHS requirements 6.4 Handle sick and injured stock in accordance with workplace requirements

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to MTMP2010A Apply animal welfare and handling requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPA2006 Apply animal welfare and handling requirements

Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Performance Evidence

The candidate must identify animal welfare issues and comply with the necessary requirements when handling animals.

The candidate must:

- identify sick or injured animals
- identify out-of-specification animals
- accurately complete records of livestock movement
- communicate effectively and appropriately with fellow workers (e.g. to exchange information with stockperson)
- identify signs and causes of stress in animals
- comply with workplace procedures and requirements for handling livestock and minimising livestock stress
- maintain flow of livestock with minimal livestock stress
- identify the relevant sections of the animal welfare standard and code
- identify relevant regulatory requirements

Knowledge Evidence

The candidate must demonstrate a basic factual, technical and procedural knowledge of:

- workplace procedures for receipt and/or dispatch of animals
- workplace requirements for maintaining flow and order of animals
- impact of stress and injury on the animal
- impact of stress and injury on product quality, including carcasses, hides and skins
- stock identification systems including National Livestock Identification System (NLIS)
- lot identification of stock and its importance with regard to trace back
- workplace health and safety hazards of handling stock
- feed and water requirements where relevant
- the relevant sections of the animal welfare standard and code

- relevant work instructions and Standard Operating Procedures (SOPs) associated with tasks undertaken
- customer and community expectations
- workplace and regulatory requirements

Assessment Conditions

Competency must be demonstrated utilising the most current legislation and codes.

Assessment must involve some practical demonstration of competency in the relevant workplace.

As a minimum, the following three forms of assessment must be used:

- quiz of underpinning knowledge
- workplace demonstration
- workplace referee or third-party report of performance over time

Assessors must satisfy the current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPA2174 Clean after operations - boning room

Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Application

This unit describes the skills and knowledge required to clean and sanitise a boning room. It deals with the skills and knowledge required to operate, strip down and clean all the mechanical aids in the boning room (e.g. packing machinery, conveyors, elevators, scales, recording and labelling machines). It also involves the operation of high pressure cleaning equipment and the use of approved cleaning chemicals in the plant.

This unit is applicable to workers cleaning boning rooms after production has finished. The boning rooms may be attached to abattoirs or in smallgoods plants or part of food services, game processing or wholesaling operations.

All work should be carried out to comply with workplace and hygiene requirements.

This unit applies to individuals who work under general supervision, exercise limited autonomy and have some accountability for their own work.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

This unit must be delivered and assessed in the context of Australian meat processing standards and regulations.

Pre-requisite Unit

Nil.

Unit Sector

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Clean boning room	1.1 Clean boning room in accordance with cleaning schedule and work instructions 1.2 Undertake cleaning procedures to minimise condensation 1.3 Use cleaning chemicals in accordance with manufacturer's specifications and workplace health and safety requirements 1.4 Identify major areas of contamination 1.5 Ensure cleaning procedures meet pre-operational hygiene requirements 1.6 Ensure surfaces are left free of excess moisture
2. Clean boning room machinery	2.1 Isolate machinery in accordance with workplace requirements 2.2 Clean boning room packing machinery in accordance with workplace requirements and manufacturer specifications 2.3 Isolate and clean conveyers and elevators 2.4 Clean electronic scales, recording and labelling machines in accordance with workplace requirements and manufacturer's specifications

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to MTMP2197C Clean after operations – boning room.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPA2174 Clean after operations - boning room

Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Performance Evidence

The candidate must clean and sanitise a boning room.

The candidate must:

- clean boning room in accordance with workplace requirements
- clean boning room machinery in accordance with workplace requirements
- observe workplace health and safety requirements for cleaning the boning room
- identify and apply relevant regulatory requirements
- use communication skills relevant to work instructions and Standard Operating Procedures (SOPs)
- monitor program for boning room hygiene and sanitation including surface swabbing and pre-operational checks

Knowledge Evidence

The candidate must clean and sanitise a boning room.

The candidate must:

- importance of drying, and of avoiding condensation in boning rooms
- cleaning schedule for the boning room
- major sources and locations of contamination in the boning room
- specific cleaning programs and workplace health and safety requirements for boning room machinery and conveyor systems

Assessment Conditions

Assessment must be conducted in a registered operating meat processing plant.

Competency must be demonstrated during normal cleaning operations.

As minimum, the following three forms of assessment must be used:

- quiz of underpinning knowledge
- workplace demonstration
- workplace referee or third-party report of performance over time

Assessors must satisfy the current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP201 Operate a poultry dicing, stripping or mincing process

Modification History

Release	Comments
Release 1	This version released with Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a poultry product dicing, stripping or mincing process.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of dicing, stripping or mincing equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the dicing, stripping or mincing equipment and process for operation	1.1 Confirm the availability of raw product, additives and equipment to meet the process requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance criteria
	status 1.3 Identify and fit personal protective clothing and equipment as required by workplace safety procedures 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter required processing or operating parameters to meet process requirements 1.6 Check equipment performance and adjust if required, to meet process requirements 1.7 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the dicing, stripping or mincing process	2.1 Start up and operate the dicing, stripping or mincing process according to health and safety, food safety and environmental guidelines 2.2 Monitor equipment to identify variations in operating conditions 2.3 Identify and report variations in equipment operation and maintenance requirements according to workplace procedures 2.4 Monitor process to confirm that the product meets the required specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace cleaning and sanitation standards 2.7 Maintain workplace records in required format
3. Shut down the dicing, stripping or mincing process	3.1 Identify and implement the appropriate shutdown procedure 3.2 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and machinery operation requirements

Skill	Description
Writing	Complete records according to workplace guidelines
Numeracy	- Monitor control points and adjust product flow rate for equipment - Monitor mixing times for the mincing process
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information using required communication method
Get the work done	Solve routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP201 Operate a poultry dicing, stripping or mincing process	FDFPO2001A Operate a dicing, stripping or mincing process	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP201 Operate a poultry dicing, stripping or mincing process

Modification History

Release	Comments
Release 1	This version released with Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that the individual has demonstrated the dicing, stripping or mincing process at least once, including:

- confirming availability of materials for dicing, stripping or mincing process
- identifying and applying safe work practices
- selecting, fitting and using appropriate personal protective clothing and equipment
- conducting pre-start checks on machinery used for dicing, stripping or mincing
- starting, operating, monitoring and adjusting dicing, stripping or mincing process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- safely shutting down equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the dicing, stripping and mincing process, including temperature generated by the process and effect on product
- basic operating principles and parameters of equipment, including the main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

- services required for the dicing, stripping and mincing process and action to take if services are not available
- quality characteristics to be achieved by the dicing, stripping and mincing process
- quality requirements of materials suitable for processing and effect of variation on process performance
- methods used to monitor the process, including inspecting, measuring and testing
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the dicing and stripping and mincing process, and related control measures
- typical health and safety hazards associated with the poultry product dicing, stripping or mincing process and controls to managing hazards
- requirements of different shutdowns as appropriate to the dicing, stripping and mincing process, and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- workplace requirements for recording and reporting production and performance information
- environmental issues and controls relevant to the dicing, stripping and mincing process, including waste and rework collection and handling procedures
- workplace cleaning and sanitation procedures relevant to the poultry product dicing, stripping or mincing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - dicing, stripping and mincing equipment and tubs
 - raw product and associated additives or seasonings
 - testing equipment
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - work procedures, including safe work practices, food safety, quality, cleaning and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - sampling schedules and test procedures
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP202 Operate a poultry evisceration process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down the evisceration process to deliver the poultry carcase ready for chilling.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of evisceration equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the evisceration equipment and process for operation	1.1 Confirm poultry carcasses are available to meet process requirements 1.2 Identify and confirm cleaning and maintenance requirements and status

Elements	Performance criteria
	1.3 Identify and fit personal protective clothing and equipment as required by workplace safety procedures 1.4 Adjust equipment to meet safety and production requirements 1.5 Check equipment performance and adjust if required, to meet process requirements 1.6 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the evisceration process	2.1 Start up and operate the evisceration process according to health and safety, food safety and environmental guidelines 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify and report variations in equipment operation and maintenance requirements 2.4 Remove viscera to specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace cleaning and sanitation standards 2.7 Maintain workplace records in required format
3. Shut down the evisceration process	3.1 Identify and implement the appropriate shutdown procedure 3.2 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and machinery operation requirements
Writing	Complete records according to workplace guidelines
Numeracy	Monitor supply and flow of carcasses to and from the evisceration process
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role,

Skill	Description
	including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information using required communication method
Get the work done	Solve routine problems according to workplace guideline

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP202 Operate a poultry evisceration process	FDFPO2002A Operate an evisceration process	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP202 Operate a poultry evisceration process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated the poultry evisceration process at least once, including:

- confirming availability of materials
- identifying and applying safe work practices
- selecting, fitting and using appropriate personal protective clothing and equipment
- conducting pre-start checks on machinery used for evisceration
- starting, operating, monitoring and adjusting evisceration process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- safely shutting down equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the evisceration process, including the internal organs of birds, package removal requirements and consequences of poor removal processes
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required for an evisceration process and action to take if services are not available
- adjustments required to take account of different bird size and type
- quality characteristics to be achieved by each stage of the evisceration process
- the effect of each stage of the evisceration process on the quality of the end product

- the effect of variation in carcase condition and age on evisceration process and outcomes
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the evisceration process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the evisceration process and related control measures
- work health and safety hazards associated with the evisceration process and controls, including the use of personal protective equipment and the limitations of personal protective equipment
- requirements of different shutdowns as appropriate to the evisceration process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- requirements for reporting production and performance information
- environmental issues and controls relevant to the evisceration process, including waste and rework collection and handling procedures related to the process
- workplace cleaning and sanitation procedures relevant to the poultry evisceration process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - evisceration equipment and services
 - carcases
 - testing equipment
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - work procedures, including safe work practices, food safety, quality, cleaning and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - sampling schedules and test procedures
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP203 Grade poultry carcase

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to identify and grade poultry carcase quality for further processing or packing.

This unit applies to individuals who grade carcasses in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the grading process for operation	1.1 Confirm the availability of washed and chilled carcasses to meet the process requirements 1.2 Identify and fit appropriate personal protective clothing and equipment as required by workplace safety procedures

Elements	Performance criteria
2. Inspect and grade carcasses	2.1 Inspect and grade carcasses to workplace quality specifications 2.2 Identify, rectify or report out-of-specification product or process outcomes according to workplace requirements 2.3 Maintain the work area according to workplace cleaning and sanitation standards
3. Complete the grading process	3.1 Follow workplace procedures to shut down the process 3.2 Maintain workplace records in required format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and machinery operation requirements
Writing	Complete records according to workplace guidelines
Numeracy	Monitor supply and flow of carcasses to and from the grading process
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information using required communication method
Get the work done	Solve routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP203 Grade poultry carcase	FDFPO2003A Grade carcass	Updated to meet Standards for Training Packages Minor changes to unit to clarify intent Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP203 Grade poultry carcase

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has graded at least three different carcasses, including:

- identifying and applying safe work practices
- selecting, fitting and using appropriate personal protective clothing and equipment
- assessing the quality of carcase
- deciding on the grade of carcase
- identifying out-of-specification carcasses
- completing workplace records in required format
- safely shutting down equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose of the grading and weighing process, including grading criteria and specifications at each level and the uses of product at each grade
- common types of damage or out-of-specification conditions and likely causes, including damage likely to be caused by poor handling of the carcase
- methods used to grade carcasses, including visual inspection
- contamination and food safety risks associated with the grading process and related control measures
- work health and safety hazards associated with the grading process and related controls
- procedures for taking the grading process offline in preparation for cleaning and maintenance
- requirements for recording production and performance information
- workplace cleaning and sanitation procedures relevant to the poultry grading process
- environmental issues and controls relevant to the grading process, including waste collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - carcases to be graded
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - work procedures, including safe work practices, food safety, quality, cleaning and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - sampling schedules and test procedures
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP204 Harvest edible poultry offal

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to sort, harvest and clean edible poultry offal.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of edible offal harvesting equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the harvesting equipment and process for operation	1.1 Ensure the availability of product to meet production requirements 1.2 Identify and fit personal protective clothing and equipment as

Elements	Performance criteria
	required by workplace safety procedures 1.3 Check equipment is ready for use 1.4 Carry out pre-start checks according to workplace requirements
2. Harvest and sort edible offal	2.1 Start up and operate the harvesting and sorting process according to health and safety, food safety and environmental guidelines 2.2 Identify edible offal according to workplace guidelines 2.2 Separate, sort and collect offal to meet production requirements 2.3 Monitor and identify, rectify or report out-of-specification product or process outcomes and equipment 2.4 Identify and set aside offal of unacceptable quality 2.5 Maintain the work area according to workplace cleaning and sanitation standards 2.6 Maintain workplace records in required format
3. Shut down the offal harvesting process	3.1 Collect, handle and remove edible offal according to workplace procedures 3.2 Dispose of offal waste according to workplace procedures 3.3 Identify and follow workplace procedures for shutting down the process 3.4 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures
Writing	Complete records according to workplace guidelines
Numeracy	Monitor supply and flow of materials to and from the harvesting and cleaning process
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role,

Skill	Description
	including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information using required communication method
Get the work done	Solve routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP204 Harvest edible poultry offal	FDFPO2004A Harvest edible offal	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP204 Harvest edible poultry offal

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated all steps of the offal harvesting process at least once, including:

- confirming availability of materials
- selecting, fitting and using appropriate personal protective clothing and equipment
- conducting pre-start checks on machinery used for harvesting edible offal
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- applying safe work practices and identified work health and safety hazards and controls
- safely shutting down offal harvesting equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the offal harvesting and cleaning process, including the structure and internal organs of poultry to identify, separate and remove
- contamination that can occur when offal is not correctly removed
- basic operating principles of equipment, such as main equipment components, their purpose and operating capacities, and the status and purpose of guards
- typical equipment faults and related causes, including signs and symptoms of faulty equipment
- quality standards for types of edible offal collected

- methods used to monitor the harvesting process, including inspecting, measuring and testing
- inspection points (control points) in the harvesting and cleaning process and the related procedures and recording requirements
- contamination and food safety risks associated with the harvesting process and related control measures
- work health and safety hazards and controls, including the limitations of personal protective equipment relevant to the harvesting of offal
- requirements of different shutdowns as appropriate to the harvesting and cleaning process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- requirements for reporting production and performance information
- environmental issues and controls relevant to the harvesting process, including waste and rework collection, handling and recycling procedures
- workplace cleaning and sanitation procedures relevant to the harvesting process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - offal harvesting, cleaning and washing equipment, accessories and services
 - offal to be harvested
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - edible offal specifications, control points and processing parameters
 - work procedures, including advice on safe work practices, food safety, quality, cleaning and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule and batch instructions
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP205 Operate a poultry marinade injecting process

Modification History

Release	Comments
Release 1	This version released with Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a poultry marinade injection process.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of marinade injecting equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the marinade injection equipment and process for operation	1.1 Confirm materials are available to meet production requirements 1.2 Identify and confirm cleaning and maintenance requirements

Elements	Performance criteria
	1.3 Identify and fit personal protective clothing and equipment as required by workplace safety procedures 1.4 Fit and adjust machine components and related attachments to meet requirements 1.5 Enter processing or operating parameters required for the process 1.6 Check and adjust equipment performance to meet process requirements 1.7 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the marinade injection process	2.1 Prepare and load marinade to meet production requirements 2.2 Start up and operate the process according to workplace procedures 2.3 Monitor equipment to identify variation in operating conditions and adjust or report variations according to production requirements 2.4 Monitor each stage of the process to confirm specifications are met 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace cleaning and sanitation procedures 2.7 Maintain workplace records in required format
3. Shut down the marinade injection process	3.1 Identify and implement the appropriate shutdown procedure 3.2 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures for the marinade injecting process
Writing	Complete records according to workplace guidelines
Numeracy	- Monitor marinade level and temperature - Monitor supply and flow of marinade and poultry to and from the

Skill	Description
	marinade injection process
Navigate the world of work	• Apply workplace procedures relevant to own role • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP205 Operate a poultry marinade injecting process	FDFPO2005A Operate a marinade injecting process	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP205 Operate a poultry marinade injecting process

Modification History

Release	Comments
Release 1	This version released with Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements, performance criteria in this unit. There must be evidence that the individual has demonstrated all steps of at least one complete marinade injecting process, including:

- confirming availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery used for marinade injecting process
- starting, operating, monitoring and adjusting marinade injecting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- applying safe work practices and identifying work health and safety hazards and controls
- safely shutting down equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the marinade injection process
- basic operating principles and parameters of equipment, such as main equipment components, including pumps and needle bed, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- corrective action required where operation is outside specified operating parameters
- the effect of marinade injection process on the quality of end product
- the flow of the marinade injection process and the effect of outputs on downstream processes

- quality characteristics to be achieved by the marinade injection process
- quality requirements of marinade and bird carcasses and effect of variation on process performance
- methods used to monitor the marinade injection process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the marinade injection process and the related procedures and recording requirements
- contamination and food safety risks associated with the marinade injection process and related control measures, including equipment checks required and traceability procedures to be followed where a broken or damaged needle is identified
- work health and safety hazards relevant to the poultry marinade process and appropriate controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- requirements for recording and reporting production and performance information
- environmental issues and controls relevant to the marinade injection process, including waste/rework collection, recycling and handling procedures related to the process
- workplace cleaning and sanitation procedures relevant to the marinade injection process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - marinade preparation and injection and conveying process and related equipment and services
 - poultry and marinade mix for processing
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - work procedures, including advice on safe work practices, food safety, cleaning, quality and environmental requirements
 - information on equipment capacity, control points and operating parameters
 - production schedule/batch instructions
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP206 Operate a poultry washing and chilling process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down spin and/or air chilling equipment used to wash and chill poultry carcasses.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of washing and chilling equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the chilling equipment and process for operation	1.1 Confirm suitable carcasses are available 1.2 Identify and confirm cleaning and maintenance requirements 1.3 Identify and fit personal protective clothing and equipment as

Elements	Performance criteria
	required by workplace safety procedures 1.4 Enter processing or operating parameters to meet requirements 1.5 Check and adjust equipment performance 1.6 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the chilling process	2.1 Start up and operate the chilling process according to workplace requirements 2.2 Monitor equipment to identify variation in operating conditions and adjust or report variations according to production requirements 2.3 Monitor each stage of the process to confirm specifications are met 2.4 Identify, rectify or report out-of-specification product or process outcomes 2.5 Maintain the work area according to workplace cleaning and sanitation requirements 2.6 Enter workplace records in required format
3. Shut down the chilling process	3.1 Identify and implement the appropriate shutdown procedure 3.2 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures for the washing and chilling process
Writing	Complete records according to workplace guidelines
Numeracy	- Monitor control points for air and water temperature and water tank levels - Monitor carcase immersion time
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements

Skill	Description
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP206 Operate a poultry washing and chilling process	FDFPO2006A Operate a washing and chilling process	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP206 Operate a poultry washing and chilling process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit. There must be evidence that the individual has demonstrated at least one entire washing and chilling process, including:

- confirming availability of materials and equipment
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery used for a washing and chilling process
- starting, operating, monitoring and adjusting washing and chilling process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- applying safe work practices and identified work health and safety hazards and controls
- safely shutting down equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the chilling process, including the purpose of both washing and chilling as it affects bacterial load
- basic operating principles and parameters of equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- corrective action required where operation is outside specified operating parameters, such as specifications for temperature range of washers and chillers
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- services required for the washing and chilling process and action to take if services are not available

- the effect of each stage on the quality of end product, including the relationship between immersion time, water temperature, and agitation on the amount of water absorbed by the carcase and on washing efficiency
- the flow of the chilling process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the chilling process
- quality requirements of carcasses and materials and effect of variation on chilling process performance
- methods used to monitor the chilling process, such as inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the chilling process and the related procedures and recording requirements, including procedures for measuring deep muscle temperature
- contamination and food safety risks associated with the chilling process and related control measures
- work health and safety hazards and controls relevant to poultry washing and chilling, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the chilling process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- requirements for recording and reporting production and performance information
- workplace cleaning and sanitation procedures
- environmental issues and controls relevant to the chilling process, including waste and rework collection, handling and recycling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - washing and chilling and conveying process, related equipment and services
 - carcasses to be washed and chilled
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - work procedures, including advice on safe work practices, food safety, cleaning, quality and environmental requirements
 - information on equipment capacity, control points and operating parameters
 - production schedule/batch instructions
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP207 Operate the bird receival and hanging process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to receive and hang live poultry.

This unit applies to individuals who apply basic operating principles to the bird receival equipment and processes in a poultry processing environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the receiving and hanging equipment and process for operation	1.1 Confirm live birds are available for production requirements 1.2 Identify and confirm cleaning and maintenance requirements 1.3 Identify and fit personal protective clothing and equipment as required by workplace safety procedures

Elements	Performance criteria
	1.4 Fit and adjust machine components and related attachments according to production requirements 1.5 Conduct pre-start checks according to workplace requirements
2. Receive and hang birds	2.1 Inspect and confirm birds against load documentation 2.2 Operate conveyors and related equipment to meet unloading requirements 2.3 Monitor equipment to identify variation in operating conditions and adjust or report variations according to production requirements 2.4 Monitor each stage of the process to confirm specifications are met 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Inspect bird condition and remove unacceptable birds according to workplace procedures 2.7 Hang birds according to workplace procedures 2.8 Complete workplace records in required format
3. Shut down the receiving and hanging process	3.1 Identify and implement procedures for shutting down the receival conveyors and related equipment 3.2 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures for the bird receival and hanging process
Writing	Complete records according to workplace guidelines
Numeracy	- Sequence receival and hanging activities to minimise time between receival and processing - Check humidity gauges and ambient temperatures to maintain the receival environment

Skill	Description
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP207 Operate the bird receipt and hanging process	FDFPO2007A Operate the bird receipt and hanging process	Updated to meet Standards for Training Packages Code updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP207 Operate the bird receival and hanging process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has demonstrated the following steps of the bird receival and hanging process at least once:

- confirmed availability of materials including live poultry for hanging
- selected, fitted and used appropriate personal protective equipment
- conducted pre-start checks on machinery used for receiving and hanging birds
- started, operated, monitored and adjusted bird receival and hanging equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down bird receival and hanging equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic principles of bird handling, including humane treatment of birds; conditions that stress birds; and environmental design features to minimise stress, such as airflow, humidity and temperature controls
- acceptable time from bird receival to bird processing and consequences of delays in processing on product quality
- the flow of the receival and hanging process on further processing or packing stages to produce a final product
- basic operating requirements of equipment used in the bird receival and hanging process and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

- methods used to monitor the receival and hanging process, including monitoring that the receival process is paced to deliver birds to processing and/or packing areas without delay, bird condition is acceptable, the receival environment is appropriate and birds are shackled correctly
- consequences of poor receival and hanging on product quality
- work health and safety hazards and controls associated with the bird receival and hanging process
- environmental issues and controls relevant to the receival and hanging process, including procedures for disposing of dead or unfit birds
- requirements of different shutdowns as appropriate to the receival and hanging process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- requirements for recording and reporting production and performance information
- typical workplace receival documentation and related load identification procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - receival, and hanging process and related equipment and services
 - birds to use in the process
 - workplace information recording system
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity, control points and operating parameters
 - production schedule/batch instructions
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP208 Operate a poultry stunning, killing and defeathering process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to stun, kill and defeather birds.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of stunning, killing and defeathering equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the stun, kill and defeather equipment	1.1 Confirm birds are available to meet operational requirements

Elements	Performance criteria
and process for operation	1.2 Identify and confirm cleaning and maintenance requirements 1.3 Identify and fit personal protective clothing and equipment as required by workplace safety procedures 1.4 Fit and adjust machine components and related attachments 1.5 Enter processing or operating parameters required for the process 1.6 Check and adjust equipment performance to meet process requirements 1.7 Conduct pre-start checks according to workplace requirements
2. Monitor each stage of the stun, kill and defeather process	2.1 Start up and operate the stun, kill and defeathering process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and adjust or report variations according to production requirements 2.3 Monitor each stage of the process to confirm specifications are met 2.4 Confirm that birds are stunned, killed and bled to specification 2.5 Remove feathers and heads to specification 2.6 Identify, rectify or report out-of-specification product or process outcomes 2.7 Maintain the work area according to workplace cleaning and sanitation procedures 2.8 Maintain workplace records in required format
3. Shut down the stun, kill and defeather process	3.1 Identify and implement the appropriate shutdown procedure 3.2 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures for the stunning, killing and defeathering process
Writing	Complete records according to workplace guidelines

Skill	Description
Numeracy	- Monitor and adjust the stun, kill and defeather process control points including bleeding time, scald water temperature, immersion time and line speed - Monitor supply and flow of materials to and from the stun, kill and defeather process to the evisceration process
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP208 Operate a poultry stunning, killing and defeathering process	FDFPO2008A Operate a stunning, killing and defeathering process	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP208 Operate a poultry stunning, killing and defeathering process

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has demonstrated all steps of a stunning, killing and defeathering process at least once including:

- confirming availability of materials including bird supply
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery used for stunning, killing and defeathering
- starting, operating, monitoring and adjusting stun, kill and defeathering process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- applying safe work practices and identifying work health and safety hazards and controls
- shutting down equipment safely
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each part of the stun, kill and defeather process
- basic principles of bird handling, including humane treatment of birds; conditions that stress birds; and environmental design features to minimise stress, such as airflow, humidity and temperature controls
- basic operating requirements and parameters of equipment used in the poultry stunning, killing and defeathering process and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

- the effect of each stage on the quality of end product, including the relationship between the bleeding stage and final product quality and between scald temperature and immersion time on the defeathering stage
- quality characteristics to be achieved by the stun, kill and defeather process
- methods used to monitor the stun, kill and defeather process
- inspection or test points (control points) in the process and the related procedures
- contamination and food safety risks associated with the stun, kill and defeather process and related control measures
- work health and safety hazards and controls associated with poultry stunning, killing and defeathering process
- environmental issues and controls relevant to the stun, kill and defeather process, including systems in place to collect, treat and dispose of waste and by-products including blood, water, feathers and bird parts
- requirements of different shutdowns as appropriate to the stun, kill and defeather process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- requirements for recording and reporting production and performance information
- workplace cleaning and sanitation procedures relevant to the stun, kill and defeather process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - stunning, killing and defeathering equipment and related conveying process and services
 - birds to be processed
 - cleaning materials and equipment
 - workplace information recording system
- specifications:
 - work procedures, including advice on safe work practices, food safety, cleaning, quality and environmental requirements
 - information on equipment capacity, control points and operating parameters
 - production schedule
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP301 Operate a poultry carcass delivery system

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to plan, set up and operate a carcass delivery system to deliver birds to the packaging area to meet production orders.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a carcass delivery system in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the poultry carcass delivery system for operation	1.1 Select and load computer program to suit product requirements 1.2 Control line start-up to meet production requirements 1.3 Identify bird drop requirements

Elements	Performance criteria
	1.4 Set system to meet production requirements 1.5 Identify and fit personal protective clothing and equipment as required by workplace safety procedures 1.6 Carry out pre-start checks according to workplace procedures
2. Monitor system operation	2.1 Enter new orders and set system parameters to meet requirements through the day 2.2 Adjust priorities to meet production and customer requirements 2.3 Monitor weight ranges and adjust system settings to meet customer orders 2.4 Identify variation in equipment operation and report maintenance requirements 2.5 Confirm that specifications are met 2.6 Identify, rectify or report out-of-specification product or process outcomes according to workplace requirements
3. Hand over system operation	3.1 Maintain workplace records in required format 3.2 Carry out handover according to workplace procedures 3.3 Ensure process operators are aware of system and related equipment status at completion of handover
4. Shut down the system	4.1 Identify and implement the appropriate shutdown procedure 4.2 Identify and report maintenance requirements according to workplace procedures
5. Contribute to continuous improvement of the system	5.1 Review system performance against output targets 5.2 Suggest opportunities for system improvements 5.3 Suggest improvements to operational procedures or processes

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and directions for the safe operation of equipment used in the carcase delivery system

Skill	Description
Writing	Records information related to equipment operation in required format
Numeracy	- Confirm that number of birds matches production order requirements - Monitor system operation including timely flow and delivery of birds to meet production requirements
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with others	- Use appropriate vocabulary, including technical language directly relevant to role - Report system performance using required communication method
Get the work done	Identify and address routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP301 Operate a poultry carcass delivery system	FDFPO3001A Operate a chickway system	Updated to meet Standards for Training Packages Content updated to match current industry requirements Code and title updated to reflect changed training package	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP301 Operate a poultry carcase delivery system

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated all steps to operate a carcase delivery system at least once, including:

- selecting and loading correct computer program
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on system
- setting computer settings to meet production requirements
- starting, operating, monitoring and adjusting equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- applying safe work practices and identifying work health and safety hazards and controls
- conducting production handover
- safely shutting down equipment
- applying food safety procedures to work practices
- contributing to workplace improvements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- carcase delivery system configuration, including system flow, layout and drop points
- customer ordering procedures, including common terms used to describe product and order requirements, and criteria to apply to prioritise customer orders
- basic operating principles of equipment and programs used to:
 - deliver the required birds to the correct locations within constraints of birds available
 - generate system reports

- limits and ranges of system to adjust for weight distribution
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- main alarms and corrective action required if alarms are activated
- systems and responsibilities for communicating required information to others
- hazards, risks and controls associated with a poultry carcase delivery system
- methods for monitoring work health and safety, food safety, quality and environmental hazards and risks
- workplace procedures for identifying and communicating system improvements.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - system equipment and related accessories and services
 - birds for processing
 - packing area
 - workplace information recording system
- specifications:
 - information on equipment capacity and operating parameters
 - kill schedules, customer orders and related advice on system requirements
 - communication and recording procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPP302 Debone and fillet poultry product (manually)

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Application

This unit of competency describes the skills and knowledge required to manually debone and fillet poultry within a poultry production environment.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of manual deboning and filleting equipment and processes in a poultry production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, work health and safety, and environmental codes, regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Poultry Processing (P)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the deboning and filleting equipment and process for operation	1.1 Confirm washed and chilled carcasses or pieces are available 1.2 Clean and set equipment components to meet requirements 1.3 Identify and fit personal protective clothing and equipment as

Elements	Performance criteria
	required by workplace safety procedures 1.4 Check and adjust equipment performance to meet the process requirements 1.5 Conduct pre-start checks according to workplace procedures
2. Operate deboning and filleting process operation	2.1 Deliver carcasses or pieces to the boning area according to process requirements 2.2 Inspect carcasses or pieces to confirm quality specifications 2.3 Remove bones and prepare fillets to specification 2.4 Identify variation in equipment operation and rectify or report variation according to workplace requirements 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Clean equipment and maintain the work area according to workplace sanitation and hygiene procedures 2.7 Maintain workplace records in required format
3. Shut down the deboning/filleting process	3.1 Identify and implement the appropriate shutdown procedure 3.2 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret directions for the safe operation of manual deboning and filleting equipment
Writing	Complete records according to workplace guidelines
Numeracy	Monitor supply and flow of carcasses and pieces to the manual deboning and filleting process
Navigate the world of work	- Apply workplace procedures relevant to own role - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements
Interact with	Use appropriate vocabulary, including technical language directly

Skill	Description
others	relevant to role Report manual deboning process performance using required communication method
Get the work done	Identify and address routine problems according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AMPP302 Debone and fillet poultry product (manually)	FDFPO3002A Debone and fillet product (manually)	Updated to meet Standards for Training Packages Code and title updated to reflect changed training package Minor changes to elements and performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPP302 Debone and fillet poultry product (manually)

Modification History

Release	Comments
Release 1	This version released with AMP Australian Meat Industry Training Package Version 3.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated all steps of the manual deboning and filleting process at least once, including:

- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on equipment used for deboning
- assessing carcase or pieces to ensure quality
- manually deboning and filleting poultry
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records in required format
- applying safe work practices and identifying work health and safety hazards and controls
- cleaning deboning equipment
- applying food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose of the deboning and filleting process, including the skeletal structure of poultry products and the effect of this process on portion control and yield
- the flow of the deboning and filleting process and the effect of outputs on downstream processes
- quality characteristics to be achieved for the different types of cuts required, including the consequences of failing to remove bones and preparing fillets to specification
- quality requirements of carcasses and pieces suitable for processing and effect of variation on process performance
- knife techniques and handling, sharpening, cleaning and storage procedures

- basic operating principles of equipment components used in the deboning and filleting process
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- contamination and food safety risks associated with the deboning and filleting process and related control measures
- work health and safety hazards and controls, including safety related to use of knives
- procedures and responsibility for recording and reporting production and performance information
- environmental issues and controls relevant to the deboning and filleting process, including waste collection and handling procedures related to the process
- workplace maintenance, cleaning and sanitation procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a poultry production workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - deboning and filleting equipment and services
 - carcasses and pieces to be filleted
 - cleaning equipment and materials
 - workplace information recording system
- specifications:
 - work procedures, including advice on safe work practices, food safety, cleaning, quality and environmental requirements
 - information on equipment capacity, processing and operating parameters
 - production schedule/batch instructions
 - sampling schedules and test procedures
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPR322 Prepare and produce value added products

Modification History

Release	TP Version	Comment
1	AMPv1.0	Initial release

Application

This unit describes the skills and knowledge required to prepare and produce more complex value added products, such as those employing pastry, dairy products or cooking. It includes preparing ingredients and following recipes. The operation of processing equipment to produce value-added products may also be required.

This unit is applicable to workers in meat retailing and food services enterprises.

All training must be conducted in accordance with Australian meat industry standards and regulations.

All work should be carried out to comply with workplace requirements and hygiene standards.

This unit applies to individuals who work under broad direction and take responsibility for their own work.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

AMPX209 Sharpen knives

Unit Sector

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare and operate processing equipment used in producing value-added products	1.1 Prepared and operate processing equipment according to hygiene, and health and safety requirements 1.2 Identify faults in line with manufacturer and workplace requirements 1.3 Use equipment according to manufacturer, workplace and workplace health and safety requirements 1.4 Performed start-up and shut-down procedures according to manufacturer and workplace requirements
2. Clean processing equipment	2.1 Clean equipment to manufacturer's, workplace health and safety, hygiene and workplace requirements
3. Follow recipe	3.1 Follow recipes to prepare and produce value-added products to product specifications
4. Select ingredients for formulation of value-added products	4.1 Select ingredients in accordance with recipes, policy and practice, and regulatory requirements 4.2 Weigh ingredients in accordance with recipe specifications and regulatory requirements 4.3 Label ingredients according to workplace and regulatory requirements
5. Prepare meat, stuffings, seasonings and force meat for value-added products	5.1 Prepare meat according to recipes, policy and practice 5.2 Prepare stuffings, seasonings and force meat in accordance with recipes, policy and practice
6. Prepare pastry, marinades, sauces, and glazes for value-added product	6.1 Prepare pastry, marinades, sauces and glazes in accordance with recipes, policy and practice
7. Mix ingredients	7.1 Weigh ingredients in accordance with recipe requirements 7.2 Add ingredients to meat according to recipes, product specifications and regulatory requirements 7.3 Blend ingredients to achieve product consistency according to recipes and product specifications
8. Produce value-added products	8.1 Formulate product according to product specifications 8.2 Present product according to product specifications and policy

Element	Performance criteria
	and procedures 8.3 Use pastry types according to recipes and workplace requirements 8.4 Skewer meat according to recipes and workplace requirements
9. Store products and ingredients	9.1 Store product according to workplace and regulatory requirements 9.2 Store ingredients according to workplace and regulatory requirements 9.3 Identify shelf life of products and take appropriate action 9.4 Identify effects of ingredients on shelf life and take appropriate action

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

MTMR323A Prepare and produce value added products	E

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPR322 Prepare and produce value added products

Modification History

Release	TP Version	Comment
1	AMPv1.0	Initial release

Performance Evidence

The candidate must be able to produce value-added meat products from a minimum of three species, using pastry, fresh produce, dried herbs and spices and marinades.

The candidate must:

- make adjustments to equipment when necessary according to manufacturer's, workplace and workplace health and safety requirements
- describe shelf life of products, factors affecting shelf life and effects of different ingredients on shelf life
- explain the permissible use of additives and ingredients in value-added products
- identify suitable alternatives from existing stock where quantities of required ingredients are not available, as applicable
- work with team members to develop new value-added products
- identify sub-standard product and rectify appropriately
- label value-added products according to workplace and regulatory requirements
- provide advice to customers on ingredients in value-added products
- seek advice on new recipes and products from appropriate sources
- use communication skills appropriate to the task
- use mathematical skills as required for production of value-added products
- estimate measures to verify calculations

Knowledge Evidence

The candidate must demonstrate a factual, technical, procedural and theoretical knowledge of:

- regulatory requirements regarding use and storage of fruit and vegetables
- shelf life of products, factors affecting shelf life and effects of different ingredients on shelf life
- range of effects on the product and on consumer health of the use of incorrect and inadequate quantities of ingredients
- properties of correct blending

- purpose and use of processing equipment in the preparation of value-added products
- use and purpose of stuffings, seasoning and force meat in producing value-added products
- use and purposes of ingredients in producing value-added products
- quality requirements related to production of value-added products
- effect of various ingredients on product shelf life
- procedures for cleaning processing equipment
- workplace health and safety and hygiene requirements related to producing value-added products

Assessment Conditions

Competency must be demonstrated over time and under typical operating conditions for the enterprise.

Assessment must occur in the workplace under normal operating conditions or in a simulated environment.

Where the candidate does not produce value-added products in their usual place of work they must complete the requirements of the unit in an alternative work placement or in a simulated environment.

The following three forms of assessment must be used:

- demonstration in the workplace or simulated environment
- quiz of underpinning knowledge
- workplace referee or third-party report of performance over time

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPX207 Vacuum pack product

Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Application

This unit describes the skills and knowledge required to pack meat products using vacuum packaging.

This unit is applicable to workers packing meat and meat products in boning rooms, offal rooms, smallgoods plants, wholesalers and food services operations. It is not applicable to small scale vacuum packaging in retail operations.

This unit must be delivered in the context of Australian meat processing standards and regulations.

All work should be carried out to comply with workplace and regulatory requirements.

This unit applies to individuals who work under general supervision, exercise limited autonomy and have some accountability for their own work.

Pre-requisite Unit

Nil.

Unit Sector

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Select packaging	1.1 Bag product in appropriately sized bag

Element	Performance criteria
	1.2 Arrange product in appropriate container
2. Set machine requirements	2.1 Complete requirements in preparation for start-up of vacuum packing machine to workplace requirements 2.2 Set machine requirements 2.3 Follow start-up procedures to workplace requirements 2.4 Attach and change packing materials to workplace requirements and product specification 2.5 Place bagged meat on the vacuum packing machine or in the formed pockets as appropriate 2.6 Place open ends of bags flat across the sealing bar or meat contained in pockets as appropriate 2.7 Follow workplace health and safety, hygiene and sanitation requirements
3. Operate machinery	3.1 Operate vacuum packaging machine in accordance with workplace requirements 3.2 Vacuum pack a variety of products to customer specifications, hygiene and sanitation, workplace health and safety, and Quality Assurance (QA) requirements at a speed that is the same as production requirements 3.3 Shrink bags using hot water baths where appropriate 3.4 Drain bagged cuts 3.5 Perform shut-down procedures to workplace requirements
4. Perform routine maintenance	4.1 Change dyes according to workplace requirements 4.2 Take corrective action when leaks and defects are identified, according to workplace requirements 4.3 Change plates as required
5. Ensure quality of packaging and product	5.1 Inspect bagged cuts for leaks and other defects 5.2 Place bagged cuts in cartons according to specifications

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to MTMPSR201C Vacuum pack product.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPX207 Vacuum pack product

Modification History

Release	TP Version	Comment
1	AMPv2.0	Initial release

Performance Evidence

The candidate must be observed vacuum packing products.

The candidate must:

- prepare for vacuum packaging according to workplace health and safety, and workplace requirements
- vacuum pack bagged cuts with no leaks or defects
- explain defects that can occur during packaging
- demonstrate hygienic cleaning of equipment
- demonstrate hygienic work practices for vacuum packing
- apply relevant communication and mathematical skills
- apply relevant regulatory requirements
- manage time and priorities

Knowledge Evidence

The candidate must demonstrate a factual, technical, procedural and theoretical knowledge of:

- sub-standard or contaminated product and workplace procedures for dealing with sub-standard or contaminated product
- defects that can occur during packaging
- packaging requirements
- specific workplace health and safety requirements for vacuum packing
- purpose of vacuum packaging
- relevant communication and mathematical skills
- relevant regulatory requirements
- general operating principles, including start-up and shut-down procedures
- manufacturer's and workplace requirements for vacuum packaging of product

Assessment Conditions

Competency should be demonstrated at the normal speed of production.

Assessment should take place in an operating meat processing plant or food service operation.

Recommended methods of assessment include:

- quiz of underpinning knowledge
- workplace demonstration or project
- workplace referee or third-party report of performance over time

Assessors must satisfy the current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

AMPX209 Sharpen knives

Modification History

Release	TP Version	Comment
1	AMPv1.0	Initial release

Application

This unit describes the skills and knowledge required to maintain knives for safe and effective use in a meat establishment.

This unit is applicable to any worker who is required to sharpen a knife to use in a processing, wholesaling or retail meat establishment. This unit is a pre-requisite for any other unit where a knife is used to perform a task.

This unit must be delivered in the context of Australian meat industry standards and regulations.

All work should be carried out in accordance with workplace requirements, regulatory requirements and hygiene standards.

This unit applies to individuals who work under general supervision, exercise limited autonomy and have some accountability for their own work.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Sharpen knives	1.1 Sharpen knives according to workplace requirements 1.2 Sharpen knives to maintain bevel edge 1.3 Use steel correctly to maintain bevel edge and to meet workplace health and safety requirements
2. Work safely with others	2.1 Use knives in ways which minimise the risk of injury 2.2 Use knives safely at all times in accordance with workplace health and safety, hygiene and sanitation, and food safety requirements
3. Maintain knives and associated equipment	3.1 Maintain knives to hygiene and sanitation, and workplace requirements 3.2 Maintain, clean and store knife-sharpening equipment to hygiene and sanitation, and workplace requirements

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

MTMPSR203A Sharpen knives	E

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

Assessment Requirements for AMPX209 Sharpen knives

Modification History

Release	TP Version	Comment
1	AMPv1.0	Initial release

Performance Evidence

The candidate must be observed maintaining knives for safe and effective use in a meat establishment. Competency must be demonstrated in conjunction with a skill or task requiring the use of a knife. Evidence must demonstrate the candidate's consistency of performance over time.

The candidate must:

- steel a knife correctly
- use safe techniques of knife sharpening to workplace, hygiene and sanitation, and health and safety requirements

Knowledge Evidence

The candidate must demonstrate a factual, technical, procedural and theoretical knowledge of:

- steps in steeling a knife to maintain edge
- technique to sharpen a knife with an appropriate bevel edge
- theory of knife sharpening
- sterilisation, and hygiene and sanitation requirements related to knife sharpening
- workplace health and safety issues related to the use and sharpening of knives
- relevant regulatory requirements

Assessment Conditions

Assessment can be carried out in an actual or simulated workplace.

The following three forms of assessment must be used:

- quiz of underpinning knowledge
- workplace demonstration
- workplace referee or third party report of performance over time

Assessors must satisfy current standards for RTOs.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5e2e56b7-698f-4822-84bb-25adbb8443a7>

BSBCUS301 Deliver and monitor a service to customers

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify customer needs, deliver and monitor customer service and identify improvements in the provision of customer service.

It applies to individuals who apply a broad range of competencies in various work contexts. In this role, individuals often exercise discretion and judgement using appropriate theoretical knowledge of customer service to provide technical advice and support to customers over short or long term interactions.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Customer Service

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify customer needs	1.1 Use appropriate interpersonal skills to accurately identify and clarify customer needs and expectations 1.2 Assess customer needs for urgency to determine priorities for service delivery according to organisational and legislative requirements 1.3 Use effective communication to inform customers about available choices for meeting their needs and assist in the selection

ELEMENT	PERFORMANCE CRITERIA
	of preferred options 1.4 Identify limitations in addressing customer needs and seek appropriate assistance from designated individuals
2 Deliver a service to customers	2.1 Provide prompt service to customers to meet identified needs in accordance with organisational and legislative requirements 2.2 Establish and maintain appropriate rapport with customers to ensure completion of quality service delivery 2.3 Sensitively and courteously handle customer complaints in accordance with organisational and legislative requirements 2.4 Provide assistance or respond to customers with specific needs according to organisational and legislative requirements 2.5 Identify and use available opportunities to promote and enhance services and products to customers
3 Monitor and report on service delivery	3.1 Regularly review customer satisfaction with service delivery using verifiable evidence according to organisational and legislative requirements 3.2 Identify opportunities to enhance the quality of service and products, and pursue within organisational and legislative requirements 3.3 Monitor procedural aspects of service delivery for effectiveness and suitability to customer requirements 3.4 Regularly seek customer feedback and use to improve the provision of products and services 3.5 Ensure reports are clear, detailed and contain recommendations focused on critical aspects of service delivery

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2 2.1, 2.3, 2.4, 3.1, 3.5	- Comprehends textual information to determine customer service requirements - Proofreads texts for clarity of meaning and accuracy of grammar and punctuation

Writing	2.3, 3.5	- Completes responses to customer complaints in required format - Prepares reports using sequencing, format and words to communicate recommendations clearly and effectively
Oral Communication	1.1, 1.3, 1.4, 2.2, 2.3, 2.4	- Provides information or advice using structure and language to suit the audience - Asks questions and listens to gain information or confirm understanding
Navigate the world of work	1.2, 2.1-2.4, 3.1, 3.2	Recognises, understands and applies organisational policies and procedures relevant to role
Interact with others	1.1, 1.3, 1.4, 2.2, 2.3, 2.4, 3.4	- Selects and uses appropriate communication conventions to establish connections, build rapport, seek information and develop professional working relationships - Adjusts personal communication style in response to the opinions, values and particular needs of others
Get the work done	1.2, 2.3, 2.5, 3.1-3.5	- Plans and implements systems to gather and organise information - Monitor actions and progress against goals and implements adjustments as appropriate - Uses problem-solving skills to analyse and respond to customer complaints or enquiries - Identifies and follows up on opportunities to improve work practices and outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCUS301 Deliver and monitor a service to customers	BSBCUS301B Deliver and monitor a service to customers	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCUS301 Deliver and monitor a service to customers

Modification History

Release	Comments
Release 1	This version first released with Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use communication skills to establish rapport and build relationships with customers in accordance with organisational requirements
- identify customer needs using appropriate questioning and active listening skills
- provide customer service in accordance with organisational requirements
- respond to and record customer feedback and action taken according to organisational standards, policies and procedures
- produce a report which identifies and recommends ways to improve service delivery.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise key provisions of relevant legislation from all levels of government that may affect aspects of business operations
- explain organisational policy and procedures for customer service, including handling customer complaints
- provide examples of verifiable evidence that could be used to review customer satisfaction
- outline the interpersonal skills needed for serving customers, including customers with specific needs.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the customer service field of work and include access to:

- office equipment and technology
- workplace documents, organisational policies and procedures for customer service
- examples of customer complaints and feedback
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBCUS401 Coordinate implementation of customer service strategies

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0 Version created to clarify assessment conditions
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to advise, carry out and evaluate customer service strategies.

It applies to individuals who have well developed skills and a broad knowledge of customer service strategies for addressing customer needs and problems, and who may provide guidance or delegate work related tasks to others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Customer Service

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Advise on customer service needs	1.1 Clarify and accurately assess customer needs using appropriate communication techniques

ELEMENT	PERFORMANCE CRITERIA
	1.2 Diagnose problems matching service delivery to customers and develop options for improved service within organisational requirements 1.3 Provide relevant and constructive advice to promote the improvement of customer service delivery 1.4 Use business technology and/or online services to structure and present information on customer service needs
2 Support implementation of customer service strategies	2.1 Ensure customer service strategies and opportunities are promoted to designated individuals and groups 2.2 Identify and allocate available budget resources to fulfil customer service objectives 2.3 Promptly action procedures to resolve customer difficulties and complaints within organisational requirements 2.4 Ensure that decisions to implement strategies are taken in consultation with designated individuals and groups
3 Evaluate and report on customer service	3.1 Review client satisfaction with service delivery using verifiable data in accordance with organisational requirements 3.2 Identify and report changes necessary to maintain service standards to designated individuals and groups 3.3 Prepare conclusions and recommendations from verifiable evidence and provide constructive advice on future directions of client service strategies 3.4 Maintain systems, records and reporting procedures to compare changes in customer satisfaction

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.4, 2.3, 3.1	Reviews textual information and comprehends details that relate to the interests or requirements of the client and organisation
Writing	1.4, 3.3, 3.4	Creates a range of formal texts using structure, grammar and clear and specialised language to

		describe customer needs, maintain information and support a particular position
Oral Communication	1.1, 1.3, 2.1, 2.4, 3.2	Uses pace, intonation, intelligible pronunciation and listening and questioning techniques to interact effectively with others
Numeracy	2.2	Recognises and interprets numerical information and performs calculations on familiar mathematical information
Navigate the world of work	1.2, 2.3, 3.1, 3.2	Recognises and applies organisational protocols and meets expectations associated with own work
Interact with others	1.1, 1.3, 2.1, 2.4, 3.2, 3.3	- Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role - Uses a range of strategies to establish a sense of connection and build rapport with customers - Collaborates with others contributing knowledge and skills to achieve joint outcomes
Get the work done	1.2, 1.4, 2.3, 3.1- 3.4	- Applies formal and logical processes when planning and implementing tasks - Applies standard procedures when responding to familiar problems within own work context - Uses digital technologies to access, organise, present and store information relevant to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCUS401 Coordinate implementation of customer service strategies Release 2	BSBCUS401 Coordinate implementation of customer service strategies Release 1	Updated to clarify assessment conditions	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCUS401 Coordinate implementation of customer service strategies

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify assessment conditions
Release 1	This version first released with Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify the needs and priorities of the organisation in delivering services to customers
- diagnose problems in delivery of customer service
- respond to and report on customer feedback and complaints
- review client satisfaction using verifiable data
- consult and communicate effectively with relevant people
- develop and implement strategies and methods to improve customer service delivery including:
 - budgeting
 - promotion to staff
 - documentation and follow up.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the principles of customer service
- explain sources of information and techniques for identifying customer needs and reviewing customer satisfaction
- explain the organisational business structure, products and services related to customer service
- describe product and service standards and best practice models.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the customer service field of work and include access to:

- office equipment
- business technology
- organisational policies and procedures for customer service
- examples of customer complaints and feedback
- client satisfaction data
- case studies and, where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBCUS501 Manage quality customer service

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify assessment conditions
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to develop strategies to manage organisational systems that ensure products and services are delivered and maintained to standards agreed by the organisation.

It applies to individuals who supervise the provision of quality customer service within an organisation's procedures framework by others. At this level, individuals must exercise considerable discretion and judgement, using a range of problem solving and decision making strategies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Stakeholder Relations – Customer Service

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan to meet internal and external customer	1.1 Investigate, identify, assess, and include the needs of customers in planning processes

ELEMENT	PERFORMANCE CRITERIA
requirements	1.2 Ensure plans achieve the quality, time and cost specifications agreed with customers
2 Ensure delivery of quality products and services	2.1 Deliver products and services to customer specifications within organisation's business plan 2.2 Monitor team performance to consistently meet the organisation's quality and delivery standards 2.3 Help colleagues overcome difficulties in meeting customer service standards
3 Monitor, adjust and review customer service	3.1 Develop and use strategies to monitor progress in achieving product and/or service targets and standards 3.2 Develop and use strategies to obtain customer feedback to improve the provision of products and services 3.3 Develop, procure and use resources effectively to provide quality products and services to customers 3.4 Make decisions to overcome problems and to adapt customer services, products and service delivery in consultation with appropriate individuals and groups 3.5 Manage records, reports and recommendations within the organisation's systems and processes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.1, 3.2, 3.3, 3.5	Interprets and analyses textual information from a variety of sources and applies the knowledge that has been gained to evaluate standards for organisation's products and services
Writing	1.2, 3.1, 3.2, 3.3, 3.5	Produces a range of text types to convey information, requirements or recommendations matching style of writing to purpose and audience
Oral Communication	1.1, 1.2, 2.1, 2.3, 3.2	- Clearly articulates systems and standards in a team environment using language suitable to diverse audiences - Uses listening and questioning techniques to obtain

		feedback and confirm understanding
Numeracy	1.2	Interprets and comprehends mathematical information in organisation's business and customer service plans.
Navigate the world of work	2.1, 2.2, 3.1, 3.5	Recognises and applies organisational protocols and meets expectations associated with own work
Interact with others	1.1, 2.3, 3.4	- Identifies and uses appropriate conventions and protocols when communicating with colleagues and customers - Collaborates with others, taking into account their strengths and experience, to achieve desired outcomes - Provides support in field of expertise to team
Get the work done	1.1, 1.2, 2.1, 2.2, 3.1-3.5	- Develops and implements plans using logical processes and monitors and evaluates progress against stated goals - Accepts responsibility for addressing complex or non-routine difficulties, applying problem solving processes in determining a solution. - Uses digital technology to access, organise and present information in a format that meets requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBCUS501 Manage quality customer service Release 2	BSBCUS501 Manage quality customer service Release 1	Updated to clarify assessment conditions	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBCUS501 Manage quality customer service

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0 Version created to clarify assessment conditions
Release 1	This version first released with Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop and manage organisational systems for quality customer service
- develop and review plans, policies and procedures for delivering and monitoring quality customer service
- implement policies and procedures to ensure quality customer service
- solve complex customer complaints and system problems that lead to poor customer service
- monitor and assist teams to meet customer service requirements
- develop, procure and use human and physical resources to support quality customer service delivery.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the legislative and regulatory context of the organisation relevant to customer service
- describe organisational policy and procedures for customer service including handling customer complaints
- identify service standards and best practice models
- summarise public relations and product promotion
- outline techniques for dealing with customers including customers with specific needs

- explain techniques for solving complaints including the principles and techniques involved in the management and organisation of:
 - customer behaviour
 - customer needs research
 - customer relations
 - ongoing product and/or service quality
 - problem identification and resolution
 - quality customer service delivery
 - record keeping and management methods
 - strategies for monitoring, managing and introducing ways to improve customer service relationships
 - strategies to obtain customer feedback.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the customer service field of work and include access to:

- legislation, regulations and codes of practice related to customer service
- business technology
- workplace documentation and resources
- complex customer complaints
- case studies and, where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBFRA401 Manage compliance with franchisee obligations and legislative requirements

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to comply with obligations set out in the franchising agreement and with relevant legislative requirements specific to the type of franchise.

It applies to individuals who require a broad knowledge of franchisee obligations and legislative requirements and who use this knowledge to develop compliance strategies.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Franchising

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Determine franchisee obligations and legislative requirements	1.1 Identify obligations under franchising agreement 1.2 Identify relevant legislative requirements 1.3 Access codes of practice and material that interprets and explains obligations and legislative requirements 1.4 Clarify obligations and legislative requirements with franchisor and relevant government and licensing agencies

ELEMENT	PERFORMANCE CRITERIA
2 Develop strategies for compliance with franchisee obligations and legislative requirements	2.1 Analyse available information on obligations and legislative requirements to develop strategies for compliance 2.2 Check strategies with franchisor to determine suitability to operate franchise within obligations and legislative requirements 2.3 Use strategies to develop regular, cyclical compliance checks 2.4 Complete training to facilitate compliance requirements
3 Undertake scheduled compliance checks	3.1 Communicate compliance requirements to staff 3.2 Delegate compliance checks to relevant staff and provide training and support for staff to carry out these checks 3.3 Record timing and outcomes of compliance checks according to organisational requirements 3.4 Identify instances of non-compliance from compliance checks
4 Act on identified instances of non-compliance with franchisee obligations and legislative requirements	4.1 Determine courses of action to address instances of non-compliance 4.2 Seek assistance of franchisor or other relevant parties to address non-compliance 4.3 Take action to address non-compliance 4.4 Make checks to ensure non-compliance has been addressed 4.5 Monitor compliance in a specific area to ensure continuing compliance 4.6 Analyse reasons for non-compliance to guide future compliance

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	2.4	Undertakes skill development in line with compliance requirements
Reading	1.1-1.4, 2.1-2.3, 3.3, 3.4, 4.4-4.6	Recognises and interprets a variety of textual information to determine legislative and regulatory requirements, trends and outcomes

Writing	1.4, 2.1, 3.1, 3.3, 3.4, 4.2, 4.3, 4.6	Develops material for a specific audience using clear and detailed language to convey explicit information, requirements and outcomes
Oral Communication	1.4, 2.2, 3.1, 3.2, 4.2	- Delivers factual information appropriate to audience and environment using appropriate language, tone and syntax - Uses active listening and questioning techniques to clarify and confirm understanding
Navigate the world of work	1.1-1.4, 2.1, 2.3, 2.4, 3.1, 3.3, 3.4, 4.1-4.6	Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	1.4, 3.1, 3.2, 4.2	- Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role - Plays an active role in workgroup discussions, playing some attention to the perspectives of others
Get the work done	1.1, 1.2, 2.1, 2.3, 3.2, 4.1, 4.6	- Takes responsibility for planning, sequencing and delegating tasks for efficiency and effective outcomes - Selects from a range of predetermined options in routine situations, identifying and taking some situational factors into account - Reflects on outcomes and determines key concepts that could be adapted in future situations - Seeks input before implementing problem solving strategies

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBFRA401 Manage compliance with franchisee obligations and legislative requirements	BSBFRA401B Manage compliance with franchisee obligations and legislative requirements	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBFRA401 Manage compliance with franchisee obligations and legislative requirements

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package version 1.0.

Performance Evidence

Evidence of the ability to:

- develop compliance strategies in accordance with franchising agreement obligations and legislative requirements
- communicate compliance requirements to staff
- provide support to staff who will carry out compliance checks
- develop and implement schedule to carry out compliance checks
- record outcomes of compliance checks according to organisational requirements
- take action to address instances of non-compliance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the evidence requirements safely and effectively, the individual must:

- identify work health and safety (WHS) requirements:
 - as specific to nature and type of franchise
 - as generic to all workplaces
- outline other relevant legislation, codes of practice and national standards that affect franchise operations
- explain franchise specific obligations:
 - as per franchise agreement
 - as per updates and amendments to agreement over time
- describe methods for carrying out compliance checks of franchise operations
- list penalties for non-compliance within the context for franchisee obligations and legislative requirements.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership – franchising field of work and include access to:

- office equipment and resources
- relevant legislation and regulations
- examples of real franchise agreements and related documentation.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBHRM405 Support the recruitment, selection and induction of staff

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to execute tasks associated with the recruitment cycle and apply in-depth knowledge of the work of the organisation, and how recruitment and selection practices fit with other human resources functions.

This unit applies to individuals who support recruitment, selection and induction functions under the direction of a human resource manager.

No licensing, legislative, or certification requirements apply to this unit at the time of publication.

Unit Sector

Workforce Development – Human Resource Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan for recruitment	1.1 Obtain approval to fill position, clarify time lines and requirement for appointment 1.2 Assist in preparing job descriptions that accurately reflect the role requirements, according to organisational policies and procedures, legislation, codes, national standards and work health and safety (WHS) considerations 1.3 Consult with relevant personnel about job descriptions and

ELEMENT	PERFORMANCE CRITERIA
	workforce strategy 1.4 Assist in ensuring that job descriptions comply with legislative requirements and reflect the organisation's requirements for a diverse workforce 1.5 Obtain approvals to advertise position
2 Plan for selection	2.1 Choose appropriate channels and technology to advertise vacancies and/or identify potential talent pool 2.2 Advertise vacancies for staffing requirements according to organisational policies and procedures 2.3 Consult with relevant personnel to convene selection panel and develop interview questions 2.4 Assist in ensuring that interview questions comply with legislative requirements 2.5 Assist in short-listing applicants 2.6 Schedule interviews and advise relevant people of times, dates and venues
3 Support selection process	3.1 Participate in interview process and assess candidates against agreed selection criteria 3.2 Discuss assessment with other selection panel members 3.3 Correct biases and deviations from agreed procedures and negotiate for preferred candidate 3.4 Contact referees for referee reports 3.5 Prepare selection report and make recommendations to senior personnel for appointment 3.6 Advise unsuccessful candidates of outcomes and respond to any queries 3.7 Secure preferred candidate's agreement 3.8 Complete necessary documentation according to organisational procedures, observing confidentiality and privacy requirements
4 Induct successful candidate	4.1 Provide successful candidate with employment contract and other documentation 4.2 Advise manager and work team of new appointment 4.3 Advise managers and staff of candidate's starting date and make necessary administrative arrangements for pay and employee record keeping 4.4 Arrange successful candidate's induction according to

ELEMENT	PERFORMANCE CRITERIA
	organisational policy

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.4, 2.4, 2.5	- Synthesises ideas, concepts and specific information from workplace and regulatory texts to inform development of workplace documents - Evaluates information to make judgements
Writing	1.1, 1.2, 1.5, 2.2, 3.5, 3.6, 3.8, 4.2, 4.3	Produces a range of text types using specific information, workplace conventions and templates
Oral communication	1.1, 1.3, 1.5, 2.3, 2.5, 3.1-3.5, 3.7	- Asks questions and listens carefully to gather, interpret or evaluate information - Uses appropriate vocabulary to present ideas or persuasive arguments
Navigate the world of work	1.2, 1.4, 2.4, 3.3, 3.8, 4.1, 4.4	Applies workplace protocols, legislation or regulations relevant to own responsibilities
Interact with others	1.3, 2.3, 3.2, 3.3	- Selects and uses appropriate conventions and protocols when communicating with personnel, candidates or referees - Participates in conversations relevant to role responding, explaining, negotiating and persuading as required
Get the work done	2.1, 2.3, 2.6, 4.1, 4.3, 4.4	- Selects and uses digital technology to access, enter, store and retrieve information in accordance with security requirements - Takes responsibility for planning and implementing tasks for efficient and effective outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBHRM405 Support the recruitment, selection and induction of staff	BSBHRM405A Support the recruitment, selection and induction of staff	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBHRM405 Support the recruitment, selection and induction of staff

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare job descriptions
- use job descriptions to support sourcing, selecting and appointing suitable staff
- use different advertising channels to promote vacancies and/or establish a potential talent pool
- consult with managers to gain approvals
- develop selection criteria and interview questions in consultation with relevant personnel
- schedule interviews and advise relevant people of times, dates and venues
- participate in interviews and other selection techniques including assessing candidates against selection criteria to short list them
- obtain referees' reports
- prepare and distribute a selection report including feedback to give unsuccessful candidates
- advise unsuccessful candidates of the results
- secure preferred candidate's agreement and provide an employment contract
- advise other staff of the successful candidate and arrange induction.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify documentation required for recruitment, selection and induction
- explain human resources life cycle and the place of recruitment and selection
- identify legislation relevant to recruitment, selection and induction of staff
- describe channels and technology to advertise vacancies

- explain a range of interviewing techniques and other selection processes and their application.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the workforce development – human resource development field of work and include access to:

- workplace policies and procedures
- business technology
- position descriptions
- legislation, regulations, Codes and Standards relevant to staff recruitment, selection and induction
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBINN301 Promote innovation in a team environment

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to be an effective and proactive member of an innovative team.

It applies to individuals who play a proactive role in demonstrating, encouraging or supporting innovation in a team environment. The individual may be a team participant or a team leader. Teams may be formal or informal and may comprise a range of personnel.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Creativity and Innovation – Innovation

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Create opportunities to maximise innovation within the team	1.1 Evaluate and reflect on what the team needs and wants to achieve 1.2 Check out information about current or potential team members' work in the context of developing a more innovative team 1.3 Bring people into the team or make suggestions for team members based on what needs to be achieved and the potential for cross fertilising ideas

ELEMENT	PERFORMANCE CRITERIA
	1.4 Acknowledge, respect and discuss the different ways that people may contribute to building or enhancing the team
2 Organise and agree effective ways of working	2.1 Jointly establish ground rules for how the team will operate 2.2 Agree and communicate responsibilities in ways that encourage and reinforce team-based innovation 2.3 Agree and share tasks and activities to ensure the best use of skills and abilities within the team 2.4 Plan and schedule activities to allow time for thinking, challenging and collaboration 2.5 Establish personal reward and stimulation as an integral part of the team's way of working
3 Support and guide colleagues	3.1 Model behaviour that supports innovation 3.2 Seek external stimuli and ideas to feed into team activities 3.3 Proactively share information, knowledge and experiences with other team members 3.4 Challenge and test ideas within the team in a positive and collaborative way 3.5 Proactively discuss and explore ideas with other team members on an ongoing basis
4 Reflect on how the team is working	4.1 Debrief and reflect on activities and on opportunities for improvement and innovation 4.2 Gather and use feedback from within and outside the team to generate discussion and debate 4.3 Discuss the challenges of being innovative in a constructive and open way 4.4 Take ideas for improvement, build them into future activities and communicate key issues to relevant colleagues 4.5 Identify, promote and celebrate successes and examples of successful innovation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 4.2	Interprets and analyses textual information, from a wide range of sources, to identify information relevant to team activities
Writing	2.2, 3.3, 4.4	Uses clear language and formats appropriate for the audience to highlight and present specific information
Oral Communication	1.2, 1.3, 1.4, 2.1, 2.2, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5	- Actively participates in verbal exchanges of ideas and elicits the views and opinions of team members by listening and questioning - Uses clear language to clarify rules and roles relating to team activities in formal and informal situations
Numeracy	1.2, 4.2	Interprets numeric information relevant to team activities
Navigate the world of work	1.1, 3.1, 3.2, 3.5	Understands the nature and purpose of own role and how it affects others in the work context
Interact with others	1.1-1.4, 2.1, 2.2, 3.1, 3.2, 3.4, 3.5, 4.1, 4.2, 4.4, 4.5	- Uses inclusive techniques to initiate, contribute and promote discussion amongst potentially diverse team members - Recognises the importance of establishing and building effective working relationships - Selects the appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.3, 1.4, 2.2, 2.4, 2.5, 3.2, 3.4, 4.2, 4.4, 4.5	- Plans, sequences and prioritises tasks for efficient and effective outcomes - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses problem-solving processes to address less predictable problems, and when appropriate, seeking input from others - Reflects on outcomes and further explores own and the team's role in implementing innovation

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBINN301 Promote innovation in a team environment	BSBINN301A Promote innovation in a team environment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBINN301 Promote innovation in a team environment

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply practices that promote innovation within a team including:
 - modelling open and respectful communications
 - contributing to the make-up and rules of the team
 - planning and scheduling of activities
 - reflecting on activities, feedback and challenges to identify improvement options
- encourage others to contribute to innovation in the team
- implement improvements and communicate about them.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain what innovation is, the different types of innovation and the benefits of innovation
- describe the internal and external factors that contribute to a team becoming and remaining innovative including:
 - team characteristics
 - the role of group dynamics and diversity
 - broader environmental factors
- explain how activities can encourage or hinder innovation in a team including:
 - allocation of time and activities
 - modelling behaviour
 - rewards and recognition
 - communications

- feedback.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the creativity and innovation and include access to:

- workplace documents
- case studies and, where possible, real situations
- office equipment and resources
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBITU201 Produce simple word processed documents

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 2.0. Version created to correct typographical error
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to correctly operate word processing applications in production of workplace documents.

It applies to individuals who perform a range of routine tasks in the workplace, using a limited range of practical skills and fundamental knowledge of word processing and software in a defined context, under direct supervision or with limited individual responsibility.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Information and Communications Technology – IT Use

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to produce documents	1.1 Use safe work practices to ensure ergonomic, work organisation, energy and resource conservation requirements are met

ELEMENT	PERFORMANCE CRITERIA
	1.2 Identify document purpose, audience and presentation requirements, and clarify with relevant personnel as required 1.3 Identify organisational and task requirements for document layout and design
2. Produce documents	2.1 Format document using appropriate software functions to adjust page layout to meet information requirements, in accordance with organisational style and presentation requirements 2.2 Use system features to identify and manipulate screen display options and controls 2.3 Use manuals, user documentation and online help to overcome problems with document presentation and production
3. Finalise documents	3.1 Ensure final document is previewed, checked, adjusted and printed in accordance with organisational and task requirements 3.2 Ensure document is prepared within designated timelines and organisational requirements 3.3 Name and store document in accordance with organisational requirements and exit application without information loss/damage

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.3, 2.1, 2.3, 3.1, 3.3	Recognises textual information within organisational and task requirements to determine work requirements
Writing	3.1, 3.3	Records numerical and textual information in accordance with requirements of task
Oral Communication	1.2	Participates in a variety of spoken exchanges with relevant personnel in an effort to clarify document purpose, audience and presentation requirements
Navigate the world of work	1.1-1.3, 2.1, 3.1-3.3	Recognises and follows explicit and implicit protocols and meets expectations associated with own role
Interact with others	1.2	May seek guidance from more experienced work colleagues

Get the work done	2.1-2.3, 3.1-3.3	Understands functions and features of specific computer software and uses these to perform work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBITU201 Produce simple word processed documents Release 2	BSBITU201 Produce simple word processed documents Release 1	Updated to correct typographical error	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBITU201 Produce simple word processed documents

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to correct typographical error
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce documents following correct ergonomic, conservation requirements and organisational policies and procedures
- adhere to organisational style manual when formatting documents
- refer to help function and user documentation to rectify document problems
- use system features
- follow designated timelines when preparing documents.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify basic formatting styles and their effect on formatting, readability and appearance of documents
- describe purpose, use and function of word processing software
- outline organisational requirements for ergonomics, work periods and breaks, and conservation techniques
- describe what is contained in an organisational style guide.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the information and communications technology – IT use field of work and include access to:

- industry software packages
- computer user information
- relevant legislation and codes of practice
- organisational policies and procedures
- relevant workplace documentation and resources including a style guide and user manuals.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBITU202 Create and use spreadsheets

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to correctly create and use spreadsheets and charts using spreadsheet software.

It applies to individuals who perform a range of routine tasks in the workplace using a limited range of practical skills and fundamental knowledge of creating spreadsheets in a defined context under direct supervision or with limited individual responsibility.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Information and Communications Technology – IT Use

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and prepare resources	1.1 Adjust workspace, furniture and equipment to suit own ergonomic, work organisation and work health and safety (WHS) requirements 1.2 Use energy and resource conservation techniques to minimise wastage in accordance with organisational and statutory requirements 1.3 Identify spreadsheet task requirements and clarify with relevant personnel as required

ELEMENT	PERFORMANCE CRITERIA
2. Create simple spreadsheets	2.1 Ensure data is entered, checked and amended in accordance with organisational and task requirements, to maintain consistency of design and layout 2.2 Format spreadsheet using software functions; to adjust page and cell layout to meet information requirements, in accordance with organisational style and presentation requirements 2.3 Ensure formulae are used and tested to confirm output meets task requirements, in consultation with appropriate personnel as required 2.4 Use manuals, user documentation and online help to overcome problems with spreadsheet design and production
3. Produce simple charts	3.1 Select chart type and design that enables valid representation of numerical data and meets organisational and task requirements 3.2 Create chart using appropriate data range in spreadsheet 3.3 Modify chart type and layout using formatting features
4. Finalise spreadsheets	4.1 Ensure spreadsheet and any accompanying charts are previewed, adjusted and printed in accordance with organisational and task requirements 4.2 Ensure data input meets designated timelines and organisational requirements for speed and accuracy 4.3 Name and store spreadsheet in accordance with organisational requirements and exit application without data loss/damage

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.1, 2.4, 4.1, 4.3	Recognises numerical and textual information within a range of resources to determine and complete work according to requirements
Writing	2.1, 2.3, 3.2, 4.1, 4.3	Enters and amends routine data into software using a format appropriate to requirements
Oral	1.3, 2.3	Listens to short and specific instructions and uses questions to clarify understanding

Communication		Uses simple mathematical language to confirm and convey requirements
Numeracy	2.1, 2.3, 3.1, 3.2	Uses basic mathematical skills to create and apply spreadsheet formulae
Navigate the world of work	1.1-1.3, 2.1, 2.2, 3.1, 4.1-4.3	Recognises, understands and adheres to legislative and organisational requirements in undertaking own work
Interact with others	1.3	Recognises purpose of various communications directly relevant to own role and clarifies as required
Get the work done	1.3, 2.1-2.4, 3.1-3.3, 4.1-4.3	Uses key software features and functions in performing specific work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBITU202 Create and use spreadsheets	BSBITU202A Create and use spreadsheets	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBITU202 Create and use spreadsheets

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- produce documents following correct ergonomic, conservation, organisational and statutory requirements
- consult with appropriate personnel as required
- adhere to organisational style and presentation requirements
- refer to online help function and user documentation to rectify document problems
- create and modify simple charts
- follow designated timelines and ensure high accuracy when preparing documents
- demonstrate ability to prevent data loss and damage.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- demonstrate knowledge of how to format workplace documents
- describe organisational requirements for ergonomic standards, work periods and breaks, and conservation techniques
- outline organisational guidelines on spreadsheet manipulation and processing
- explain purpose and range of use of spreadsheet functions.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the information and communications technology – IT use field of work and include access to:

- industry technology

- organisational policies and procedures
- relevant legislation
- user manuals
- relevant workplace documentation and resources
- industry software packages.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBLDR403 Lead team effectiveness

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit defines skills, knowledge and outcomes required to plan and supervise the performance of the team and develop team cohesion.

It applies team leaders, supervisors and new emerging managers who have an important leadership role in the development of efficient and effective work teams.

Leaders at this level also provide leadership for the team and bridge the gap between the management of the organisation and the team members. As such they must 'manage up' as well as manage their team/s.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership - Leadership

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan to achieve team outcomes	1.1 Lead the team to identify, establish and document team purpose, roles, responsibilities, goals, plans and objectives in consultation with team members 1.2 Engage team members to incorporate innovation and

ELEMENT	PERFORMANCE CRITERIA
	productivity measures in work plans 1.3 Lead and support team members in meeting expected outcomes
2. Lead team to develop cohesion	2.1 Provide opportunities for input of team members into planning, decision making and operational aspects of work team 2.2 Encourage and support team members to take responsibility for own work and to assist each other in undertaking required roles and responsibilities 2.3 Provide feedback to team members to encourage, value and reward individual and team efforts and contributions 2.4 Recognise and address issues, concerns and problems identified by team members or refer to relevant persons as required 2.5 Model expected behaviours and approaches
3. Participate in and facilitate work team	3.1 Actively encourage team members to participate in and take responsibility for team activities and communication processes 3.2 Give the team support to identify and resolve problems which impede its performance 3.3 Ensure own contribution to work team serves as a role model for others and enhances the organisation's image within the work team, the organisation and with clients/customers
4. Liaise with management	4.1 Maintain open communication with line manager/management at all times 4.2 Communicate information from line manager/management to the team 4.3 Communicate unresolved issues, concerns and problems raised by the team/team members to line manager/management and ensure follow-up action is taken 4.4 Communicate unresolved issues, concerns and problems related to the team/team members raised by line managers/management to the team and ensure follow-up to action is taken

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance	Description

	Criteria	
Writing	1.1, 4.2	Prepares workplace plans that communicate intent and elicits feedback clearly and effectively
Oral communication	1.1, 1.3, 2.2, 2.3, 3.1, 3.2, 4.2-4.4	Engages in discussions or provides information using structure and language appropriate to the audience and situation
Interact with others	1.1-1.3, 2.1-2.5, 3.1, 3.3, 4.1	- Selects and uses appropriate conventions and protocols when communicating with team members - Adapts personal communication style to model required behaviours, build trust and positive working relationships and to show respect for the opinions and values of others - Plays a lead role in situations requiring effective collaboration, demonstrating conflict resolution skills and ability to engage and motivate others
Get the work done	1.1-1.3, 3.2	- Develops, implements and monitors plans and processes to ensure team engagement and effectiveness - Uses formal analytical thinking techniques to identify issues and generate possible solutions, seeking input from others as required

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBLDR403 Lead team effectiveness	BSBWOR402A Promote team effectiveness	Updated to meet Standards for Training Packages Title change Minor edits to clarify intent of performance criteria	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBLDR403 Lead team effectiveness

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply knowledge of organisational goals, objectives and plans
- develop a team work plan including documentation of how it was generated and how it will be monitored
- identify and incorporate innovation and productivity measures into a team work plan
- communicate with team members and management to identify and establish the team purpose, roles, responsibilities, goals plans and objectives and resolve problems
- use techniques to consult, encourage, support and provide feedback to team members
- model team leadership behaviours and approaches
- liaise with management to develop the teamwork plan, resolve issues and ensure follow-up action is taken.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must explain principles and techniques associated with:

- delegation and work allocation
- goal setting
- group dynamics and processes
- individual behaviour and difference
- leadership styles
- motivation
- negotiation
- problem solving
- planning

- workplace innovation
- workplace productivity.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- information about the organisation, including organisational structure, goals, objectives and plans
- case studies, and where possible, real situations
- workplace equipment and resources
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBLED401 Develop teams and individuals

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify assessment requirements
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to determine individual and team development needs and to facilitate the development of the workgroup.

It applies to individuals with a broad knowledge of learning and development who apply their skills in addressing development needs to meet team objectives. They may have responsibility to provide guidance or to delegate aspects of tasks to others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Workforce Development – Learning and Development

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine development needs	1.1 Systematically identify and implement learning and development needs in line with organisational requirements 1.2 Ensure that a learning plan to meet individual and group training and development needs is collaboratively developed, agreed to and

ELEMENT	PERFORMANCE CRITERIA
	implemented 1.3 Encourage individuals to self-evaluate performance and identify areas for improvement 1.4 Collect feedback on performance of team members from relevant sources and compare with established team learning needs
2. Develop individuals and teams	2.1 Identify learning and development program goals and objectives, ensuring a match to the specific knowledge and skill requirements of competency standards relevant to the industry 2.2 Ensure that learning delivery methods are appropriate to the learning goals, the learning style of participants, and availability of equipment and resources 2.3 Provide workplace learning opportunities, and coaching and mentoring assistance to facilitate individual and team achievement of competencies 2.4 Create development opportunities that incorporate a range of activities and support materials appropriate to the achievement of identified competencies 2.5 Identify and approve resources and time lines required for learning activities in accordance with organisational requirements
3. Monitor and evaluate workplace learning	3.1 Use feedback from individuals or teams to identify and implement improvements in future learning arrangements 3.2 Assess and record outcomes and performance of individuals/teams to determine the effectiveness of development programs and the extent of additional development support 3.3 Negotiate modifications to learning plans to improve the efficiency and effectiveness of learning 3.4 Document and maintain records and reports of competency according to organisational requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Learning	1.1-1.4, 2.1-2.4, 3.1, 3.3	• Uses structured approaches to set goals, monitor progress and adjust learning approaches for self and others • Builds on knowledge and experience to facilitate interaction and learning with others
Reading	1.1, 1.2, 1.4, 2.1, 2.2, 2.4, 2.5, 3.1-3.4	• Analyses textual information from a range of sources to identify organisational requirements • Analyses information from a range of sources to evaluate performance
Writing	1.1, 1.2, 1.4, 2.1, 2.5, 3.1-3.4	• Develops materials to suit the requirements of different roles and individuals in the organisation • Maintains records using correct technical and organisational vocabulary
Oral Communication	1.2, 1.3, 1.4, 2.3, 3.1, 3.3	• Uses vocabulary appropriate to context and to establish a supportive and learning environment • Uses listening and questioning techniques to confirm or show understanding of different perspectives
Navigate the world of work	1.1, 2.5, 3.4	• Recognises and responds to explicit and implicit organisational procedures and protocols Understands how own role meshes with others and contributes to broader goals
Interact with others	1.2, 1.3, 1.4, 2.2, 2.3, 3.1, 3.3	• Selects and uses appropriate conventions and protocols when communicating with co-workers in a range of work contexts • Recognises the importance of building rapport to establish effective working relationships • Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction • Negotiates with others to achieve joint/agreeable outcomes playing an active role in facilitating consensus in potentially contentious situations
Get the work done	1.1, 1.2, 1.4, 2.1, 2.2, 2.3, 2.5, 3.1, 3.2, 3.4	• Uses logical planning processes to organise, implement and monitor learning and development needs • Systematically gathers and analyses all relevant information and evaluates options to make informed decisions • Evaluates outcomes of decisions to identify opportunities for improvement

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBLED401 Develop teams and individuals Release 2	BSBLED401 Develop teams and individuals Release 1	Updated to clarify assessment requirements	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBLED401 Develop teams and individuals

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify assessment requirements
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- systematically identify and implement learning opportunities for others
- collect feedback on team and individual performance
- give and receive feedback from team members to encourage participation in and effectiveness of the team
- collaboratively develop learning plans to match skill needs of individuals and groups
- provide mentoring and coaching assistance to teams and individuals
- monitor and review workplace learning.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe facilitation techniques to encourage team development and improvement
- outline organisational policies, plans and procedures for developing teams
- identify career paths and competency standards relevant to the industry.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the workforce learning and development field of work and include access to:

- office equipment and resources
- learning and development plans, policies and procedures
- case studies and, where available, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT401 Show leadership in the workplace

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to lead teams and individuals by modelling high standards of conduct to reflect the organisation's standards and values.

It applies to individuals who are making the transition from being a team member to taking responsibility for the work and performance of others and providing the first level of leadership within the organisation. These managers have a strong influence on the work culture, values and ethics of the teams they supervise.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Model high standards of management performance and behaviour	1.1 Ensure management performance and behaviour meets the organisation's requirements 1.2 Ensure management performance and behaviour serves as a positive role model for others 1.3 Develop and implement performance plans in accordance with organisation's goals and objectives 1.4 Establish and use key performance indicators to meet

ELEMENT	PERFORMANCE CRITERIA
	organisation's goals and objectives
2. Enhance organisation's image	2.1 Use organisation's standards and values in conducting business 2.2 Question, through established communication channels, standards and values considered to be damaging to the organisation 2.3 Ensure personal performance contributes to developing an organisation which has integrity and credibility
3. Make informed decisions	3.1 Gather and organise information relevant to the issue/s under consideration 3.2 Facilitate individual's and team's active participation in decision-making processes 3.3 Examine options and assess associated risks to determine preferred course/s of action 3.4 Ensure decisions are timely and communicate them clearly to individuals and teams 3.5 Prepare plans to implement decisions and ensure they are agreed by relevant individuals and teams 3.6 Use feedback processes effectively to monitor the implementation and impact of decisions

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.1, 3.1, 3.3, 3.5, 3.6	Gathers, interprets and analyses text relating to organisational goals, standards and values to aid planning and decision making
Writing	1.3, 1.4, 3.1, 3.3, 3.5, 3.6	- Records and reports key information related to the organisational goals, standards and objectives - Researches, plans and prepares documentation for relevant stakeholders
Oral Communication	1.2, 1.3, 2.2, 2.3, 3.2, 3.4, 3.5, 3.6	Uses appropriate structure and language when developing performance plans, or when seeking and providing information about organisational goals and

		objectives
Numeracy	1.4	Identifies and comprehends mathematical information in familiar texts to establish key performance indicators
Navigate the world of work	1.1, 1.2, 1.3, 1.4, 2.1, 2.3	- Understands how own role meshes with others and contributes to broader work goals - Monitors adherence to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	1.2, 1.3, 2.2, 2.3, 3.2, 3.4, 3.5, 3.6	- Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective outcomes - Recognises the importance of taking audience, purpose and contextual factors into account when making decisions about what to communicate with whom, why and how
Get the work done	1.1, 1.3, 1.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they contribute to longer term operational and strategic goals - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Evaluates effectiveness of decisions in terms of how well they meet stated goals

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Organisation's standards and values must be identified by considering:	- explicitly stated values - values that are implied by the way the organisation conducts its business.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT401 Show leadership in the workplace	BSBMGT401A Show leadership in the workplace	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT401 Show leadership in the workplace

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify the organisation's standards and values, whether stated or implied by the way the organisation conducts its business
- evaluate own behaviour and performance against these and adjust to achieve required standards
- develop and implement performance plans and key performance indicators (KPIs) to meet organisation's goals and objectives
- use established communication channels to raise questions about standards and values that may be damaging to the organisation
- ensure own behaviour and performance contributes to the integrity and credibility of the organisation
- facilitate processes to make decisions that are based on:
 - relevant information
 - examination of options and associated risks
 - input from relevant people
- communicate about making and implementing decisions including:
 - facilitating agreement on the preferred course of action and implementation plans
 - monitoring and feedback on the implementation and impact of decisions.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how to identify an organisation's standards and values when they are:
 - stated

- implied
- articulate organisational values and expectations of behaviour
- explain basic theory of group behaviour
- outline the organisation's process for raising questions about standards and values
- give examples of behaviours and performance that would typically be considered damaging to an organisation
- explain concepts including:
 - organisational values
 - role modelling
 - integrity and credibility
 - leadership.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT402 Implement operational plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement the operational plan by monitoring and adjusting operational performance, planning and acquiring resources and providing reports on performance as required.

It applies to individuals who plan activities to achieve the measurable, stated objectives of the team and the organisation. At this level work will normally be carried out within routine and non-routine methods and procedures which require planning, evaluation, leadership and guidance of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Implement operational plan	1.1 Collate, analyse and organise details of resource requirements in consultation with relevant personnel, colleagues and specialist resource managers 1.2 Implement operational plans to contribute to the achievement of organisation's performance/business plan 1.3 Identify and use key performance indicators (KPIs) to monitor

ELEMENT	PERFORMANCE CRITERIA
	operational performance 1.4 Manage contingencies by adjusting the implementation of the operational plan in consultation with others 1.5 Provide assistance in the development and presentation of proposals for resource requirements in line with operational planning processes
2. Implement resource acquisition	2.1 Recruit and induct employees within organisation's policies, practices and procedures 2.2 Implement plans for acquisition of physical resources and services within organisation's policies, practices and procedures and in consultation with relevant personnel
3. Monitor operational performance	3.1 Monitor performance systems and processes to assess progress in achieving profit/productivity plans and targets 3.2 Analyse and use budget and actual financial information to monitor profit/productivity performance 3.3 Identify unsatisfactory performance and take prompt action to rectify the situation according to organisational policies 3.4 Provide mentoring, coaching and supervision to support individuals and teams to use resources effectively, economically and safely 3.5 Present recommendations for variation to operational plans to the designated persons/groups and gain approval 3.6 Implement systems, procedures and records associated with performance in accordance with organisation's requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.4	Actively reinforces learning by applying new knowledge and skills in mentoring, coaching and supervising others
Reading	1.1-1.5, 2.1, 2.2, 3.1, 3.2, 3.6	Identifies, interprets, analyses and reviews textual information related to the operational plan and

		monitoring of operational performance
Writing	1.1-1.5, 2.1, 2.2, 3.2-3.6	- Communicates relationships between ideas and information, matching style of writing to purpose and audience - Researches, plans and prepares workplace documentation for relevant stakeholders using organisational formats
Oral Communication	1.1, 1.4, 1.5, 2.1, 2.2, 3.3, 3.4, 3.5	Participates in a variety of spoken exchanges with a range of audiences varying structure and language to suit the audience
Numeracy	1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.1, 3.2, 3.3	Selects and uses familiar mathematical techniques to organise timely supply of adequate resources for the operational plan and to use budgetary information to monitor performance
Navigate the world of work	1.5, 2.1, 2.2, 3.3, 3.4, 3.6	Monitors adherence to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact with others	1.1, 1.4, 1.5, 2.1, 2.2, 3.3, 3.4, 3.5	- Selects and uses appropriate conventions and protocols when communicating with diverse individuals to build rapport, seek or present information - Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group communication, influencing direction and taking a leadership role on occasion
Get the work done	1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 3.1, 3.2, 3.3, 3.6	- Takes responsibility for planning, organising, implementing and monitoring tasks required to achieve required outcomes - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Evaluates effectiveness of decisions in terms of how well they met stated goals - Recognises and addresses an increasing range of familiar problems by implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT402 Implement	BSBMGT402A Implement	Updated to meet Standards for	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
operational plan	operational plan	Training Packages. Edits to clarify intent of Performance Criteria.	

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT402 Implement operational plan

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- interact with a range of people/groups to identify resource requirements, performance objectives, systems, procedures and records relating to the operational plan
- vary the operational plan and gain approval to deal with contingencies
- monitor operational performance against the performance objectives and budgets and take action to rectify unsatisfactory performance
- plan and acquire physical and human resources using organisation's systems and procedures
- manage and support personnel to achieve performance objectives. including inducting new employees and providing mentoring and coaching
- present information and recommendations to support implementation and variation of the operational plan
- document and provide reports on performance as required by the organisation.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe performance monitoring systems and processes
- describe methods for problem solving
- explain how organisational policies and procedures relate to the operational plan.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- organisational operational plans, policies and procedures
- workplace documentation and resources including budgets, physical and human resource procurement documentation, employee induction and performance monitoring procedures
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMGT403 Implement continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement the organisation's continuous improvement systems and processes. It covers using systems and strategies to actively encourage the team to participate in the process, monitoring and reviewing performance, and identifying opportunities for further improvements.

It applies to managers who have an active role in implementing the continuous improvement process to achieve the organisation's objectives. Their position is closely associated with the creation and delivery of products and services which means that they have an important role in influencing the ongoing development of the organisation.

At this level, work will normally be carried out within routine and non-routine methods and procedures, which require planning, evaluation, leadership and guidance of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Management

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Implement continuous improvement systems and	1.1 Implement systems to ensure that individuals and teams are actively encouraged and supported to participate in decision

ELEMENT	PERFORMANCE CRITERIA
processes	making processes, assume responsibility and exercise initiative 1.2 Communicate the organisation's continuous improvement processes to individuals and teams, and obtain feedback 1.3 Ensure effective mentoring and coaching allows individuals and teams to implement the organisation's continuous improvement processes
2. Monitor and review performance	2.1 Use the organisation's systems and technology to monitor and review progress and to identify ways in which planning and operations could be improved 2.2 Improve customer service through continuous improvement techniques and processes 2.3 Formulate and communicate recommendations for adjustments to those who have a role in their development and implementation
3. Provide opportunities for further improvement	3.1 Implement processes to ensure that team members are informed of savings and productivity/service improvements in achieving the business plan 3.2 Document work performance to aid the identification of further opportunities for improvement 3.3 Manage records, reports and recommendations for improvement within the organisation's systems and processes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.2, 3.3	Evaluates and integrates facts and ideas to construct meaning from a range of text types in an effort to implement continuous improvement systems and processes
Writing	1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3	- Selects vocabulary, grammatical structures and conventions appropriate to text - Researches, plans and prepares continuous improvement documentation for relevant stakeholders
Oral	1.2, 1.3, 2.3	Participates in a variety of spoken exchanges with a range of audiences using structure and language to suit

Communication		the audience
Navigate the world of work	2.1	Monitors adherence to organisational policies and procedures and considers own role in terms of its contribution to broader goals of the work environment
Interact the work of others	1.2, 1.3, 2.3, 3.1	- Selects and uses appropriate conventions and protocols when communicating with diverse individuals to seek or share information - Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group communication, influencing direction and taking a leadership role on occasion
Get the work done	1.1, 1.3, 2.1, 2.2, 3.1, 3.2, 3.3	- Takes responsibility for planning and organising own workload to achieve required outcomes - Uses systematic, analytical processes in complex, non-routine situations, setting goals, gathering relevant information and identifying and evaluating options against agreed criteria - Evaluates effectiveness of decisions in terms of how well they meet stated goals - Uses digital applications to access and filter data, extract, organise, integrate and share relevant information - Recognises the potential of new approaches to enhance work practices and outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMGT403 Implement continuous improvement	BSBMGT403A Implement continuous improvement	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMGT403 Implement continuous improvement

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- implement continuous improvement systems and provide mentoring and coaching support to enable individuals and teams to participate in decisions, take responsibility, show initiative and implement improvement processes
- implement processes to inform team members about savings and productivity/service improvements achievements
- communicate effectively to support the continuous improvement system and implementation of improvements
- apply continuous improvement to customer services including internal and external customers
- implement, monitor and adjust improvement plans, processes and procedures to improve performance
- document performance to identify further opportunities for improvement
- manage records and reports within the organisation's systems and procedures.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- give examples of continuous improvement processes
- list typical areas of need for coaching and mentoring to support continuous improvement
- explain how change management techniques can support continuous improvement and initiative
- identify the organisation's systems and data that can be used for benchmarking and monitoring performance for continuous improvement.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership field of work and include access to:

- relevant workplace documentation and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG501 Identify and evaluate marketing opportunities

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify, evaluate and take advantage of marketing opportunities by analysing market data, distinguishing characteristics of possible markets and assessing viability of changes to operations.

It applies to individuals working in a supervisory or management marketing or advertising role within a marketing or advertising team or media organisation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify marketing opportunities	1.1 Analyse information on market and business needs to identify marketing opportunities 1.2 Research potential new markets and assess opportunities to enter, shape or influence each market, and the likely contribution to the business 1.3 Explore entrepreneurial, innovative approaches and creative ideas for their potential business application, and develop into potential marketing opportunities

ELEMENT	PERFORMANCE CRITERIA
2. Investigate marketing opportunities	2.1 Identify and analyse opportunities in terms of their likely fit with organisational goals and capabilities 2.2 Evaluate each opportunity to determine its impact on current business and customer base 2.3 Use an assessment of external factors, costs, benefits, risks and opportunities to determine the financial viability of each marketing opportunity 2.4 Determine probable return on investment and potential competitors 2.5 Describe and rank marketing opportunities on their viability, and likely contribution to the business
3. Evaluate required changes to current operations	3.1 Identify and document changes needed to current operations to take advantage of viable marketing opportunities 3.2 Ensure organisational changes to service an increased or different customer base including provision for continued quality of service to existing customers 3.3 Estimate resource requirements for changed operations 3.4 Determine and communicate viability of making changes to current operations to key stakeholders 3.5 Document newly identified marketing opportunities and required changes

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.4, 3.1	Evaluates and comprehends textual information from a range of sources and draws own conclusions
Writing	1.1-1.3, 2.5, 3.1, 3.4, 3.5	Integrates information from a number of sources to develop material that supports purposes of documentation using suitable grammatical structure and clear, logical language
Oral Communication	2.5, 3.4	Presents opinions, ideas and organisational requirements clearly and creatively using language and presentation techniques appropriate to audience and

		environment Elicits views and opinions of others by listening and questioning
Numeracy	2.3, 2.4, 3.3	Evaluates financial and marketing data using whole numbers, decimals and percentages to make accurate calculations
Navigate the world of work	2.1	Recognises and follows explicit and implicit organisational protocols and meets expectations associated with own role
Interact with others	2.5, 3.4	Selects appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1-1.3, 2.1-2.4, 3.1, 3.2, 3.3, 3.4	- Develops plans to manage relatively complex tasks with an awareness of how they may contribute to longer-term operational and strategic goals - Makes decisions by systematically analysing information, identifying and evaluating options against set criteria, and choosing most appropriate option - Evaluates outcomes of decisions to identify opportunities for improvement - Develops new and innovative ideas through exploration, analysis and critical thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG501 Identify and evaluate marketing opportunities	BSBMKG501B Identify and evaluate marketing opportunities	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG501 Identify and evaluate marketing opportunities

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- identify and evaluate marketing opportunities to determine whether they can meet organisational objectives
- document how current business operations need to be modified, and list resources required, to take advantage of newly identified and evaluated opportunities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline key provisions of relevant legislation, codes of practice and national standards affecting marketing operations
- describe organisational marketing plan, structure, products and services
- explain principles of marketing and marketing mix
- describe statistical methods and techniques to evaluate marketing opportunities, including forecasting techniques.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- organisational strategic and marketing plans
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG507 Interpret market trends and developments

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to conduct an analysis of market data in order to determine organisational and competitor business performance and to prepare market and business forecasts. The information assists in developing an organisation's marketing plan and to determine the current or potential future success of marketing strategies.

This unit applies to marketing professionals who use statistical techniques to analyse organisational and competitor marketing performance and to interpret new and emerging trends when forecasting future business needs.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Interpret trends and market developments	1.1 Use statistical analysis of market data to interpret market trends and developments 1.2 Analyse market trends and developments for their potential impact on the business 1.3 Use measures of central tendency or dispersion and correlations between sets of data for quantitative interpretation of comparative

ELEMENT	PERFORMANCE CRITERIA
	market data 1.4 Perform qualitative analysis of comparative market information as a basis for reviewing business performance 1.5 Analyse the market performance of existing and potential competitors and their products or services to identify potential opportunities or threats
2. Analyse qualitative results	2.1 Analyse performance data from all areas of the business to determine success of marketing activities 2.2 Identify over-performing and under-performing products and services to be considered for redevelopment or withdrawal 2.3 Forecast existing and emerging market needs based on information available using forecasting techniques
3. Report on market data	3.1 Prepare, plot and interpret data for visual presentation 3.2 Assess visual presentation for potential problems, and take any necessary corrective action 3.3 Report on analysis of market data to meet organisational requirements in terms of content, format, level of detail and scheduling

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.2, 1.5, 2.1, 2.3	Researches, evaluates, analyses and interprets market information from a range of sources, and interprets requirements
Writing	3.1, 3.2, 3.3	Prepares reports containing complex ideas and concepts and writes in a range of styles to suit different audiences
Numeracy	1.1-1.5, 2.1, 2.3	- Collects, organises and analyses data to draw conclusions or make forecasts about trends and probability - Uses specialised statistical analysis techniques
Oral Communication	3.1, 3.3	Presents information to a range of audiences using appropriate vocabulary and non-verbal features

Interact with others	3.1, 3.3	• Demonstrates sophisticated control over oral, visual and/or written formats, drawing on a range of communication practices to present findings
Get the work done	1.1, 1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3	• Develops plans and uses effective organisational and time management skills to complete tasks with an awareness of how they may contribute to longer term operational and strategic goals • Applies systematic and analytical decision making processes in complex and non-routine situations • Uses digital technologies and systems to enter and analyse data and to present information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG507 Interpret market trends and developments	BSBMKG507A Interpret market trends and developments	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG507 Interpret market trends and developments

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- apply statistical and qualitative analysis techniques to identify:
 - current business performance
 - competitor performance
 - potential threats and opportunities
- apply qualitative and forecasting techniques to identify:
 - success of marketing activities
 - over and under-performing products and services
 - existing and emerging market needs
- document the analysis of market data including visual presentation of findings.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline internal and external sources of information relevant to forecasting market trends including:
 - business and strategic objectives
 - marketing and other business performance
 - comparative market information
 - changes in technology
 - demographic changes
 - social and cultural factors
 - economic trends

- government activities and legislative changes
- industry trends
- supplier data
- outline the legislative and regulatory context as it applies to marketing
- identify software applications that are commonly used in quantitative and qualitative analysis and outline their key features
- outline statistical concepts, methods, techniques and reporting formats commonly used in marketing including:
 - conversion rate of leads to sales
 - measures of central tendency
 - measures of dispersion
 - nature and degree of relationship between variables
 - net response rate
 - normal distribution probability curve
 - sampling
 - speed of response curve
 - recency or frequency grids
 - lifetime value of customers
 - net present value of customers.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies and, where possible, real situations.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBMKG514 Implement and monitor marketing activities

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to apply and observe marketing plan objectives and action necessary improvements.

It applies to individuals who possess a sound theoretical knowledge base in advertising management, and demonstrate a range of managerial skills. In this role, they usually lead and coordinate a marketing team, implement a marketing plan, monitor performance of marketing strategies and evaluate their effectiveness.

They also involve team members in identifying improvements for marketing strategies and formulating recommendations for future marketing activities.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Business Development – Marketing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Implement marketing strategies and tactics	1.1 Brief stakeholders who participated in the marketing planning process on their implementation roles and responsibilities 1.2 Identify and brief marketing and non-marketing personnel critical to success of the marketing plan, on objectives,

ELEMENT	PERFORMANCE CRITERIA
	performance measures, and their roles and responsibilities 1.3 Prioritise marketing strategies and identify resources for their implementation, in accordance with organisational requirements 1.4 Implement communication and team building strategies to ensure personnel responsible for each element of the marketing mix work together to meet the organisation's marketing objectives 1.5 Implement strategies for monitoring marketing activities and analysing marketing performance, in accordance with marketing plan
2. Monitor marketing strategies and tactics	2.1 Monitor and implement promotional activity against communication objectives in the marketing plan 2.2 Monitor product, pricing and distribution decisions against organisational policy and objectives of the marketing plan 2.3 Monitor marketing results against targets in the marketing plan 2.4 Monitor marketing revenue and costs against budget, and analyse record variations 2.5 Prepare and present marketing reports indicating ongoing progress towards marketing objectives
3. Evaluate and improve marketing performance	3.1 Regularly assess marketing performance against objectives 3.2 Identify opportunities for improvement through discussion with customers and personnel responsible for each element of marketing mix 3.3 Change business practices in line with changing customer requirements to maintain business relevance and viability 3.4 Document recommendations for improvement in accordance with organisational requirements 3.5 Communicate changes to marketing objectives and targets with relevant stakeholders, to facilitate implementation

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description

Reading	1.3-1.5, 2.1-2.4, 3.1, 3.4	Identifies and evaluates textual information to determine business achievements against workplace objectives
Writing	1.1, 1.2, 2.5, 3.4, 3.5	Uses clear, accurate and relevant language to organise and record information and complete workplace documentation
Oral Communication	1.1, 1.2, 1.4, 1.5, 2.5, 3.2, 3.5	- Participates in verbal exchanges using appropriate language and non-verbal features - Elicits views and opinions of others using active listening and questioning
Numeracy	1.3, 2.2-2.4	Uses mathematical techniques to analyse marketing performance, resource availability, revenue and cost
Navigate the world of work	1.3-1.5, 2.1-2.3, 2.5, 3.1, 3.4	Monitors adherence to organisational policies and objectives and considers own role in terms of its contribution to broader goals of work environment
Interact with others	1.1, 1.2, 1.4, 1.5, 2.5, 3.2, 3.5	- Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction - Recognises importance of taking audience, purpose and contextual factors into account when making decisions about what to communicate with whom, why and how
Get the work done	1.2, 1.3, 1.5, 2.1, 2.3, 2.4, 3.2, 3.3	- Develops plans and uses effective time management and organisational skills to complete tasks with an awareness of how they may contribute to longer-term operational and strategic goals - In more complex, non-routine situations, uses formal decision-making processes, setting or clarifying goals, gathering information and identifying and evaluating several choices against a limited set of criteria - When dealing with complex issues identifies cause of the problem, and uses analytical processes to generate possible solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBMKG514 Implement and monitor marketing	BSBMKG514A Implement and monitor marketing	Updated to meet Standards for Training Packages	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
activities	activities		

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBMKG514 Implement and monitor marketing activities

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- successfully implement marketing strategies identified in an organisation's marketing plan
- coordinate personnel involved in conducting marketing activities
- monitor, evaluate and report on marketing activities against defined objectives
- modify marketing activities in line with new or emerging trends.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline organisational strategic and marketing objectives, plans and performance measures
- summarise principles of marketing mix
- explain key provisions of relevant legislation, codes of practice and national standards affecting marketing operations.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the business development – marketing field of work and include access to:

- office equipment and resources
- relevant legislation, regulations, standards and codes
- organisational and marketing strategic plans
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB301 Investigate micro business opportunities

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to consider the major elements of a business idea, undertake research to determine viability of the business opportunity and present the idea with reference to the legislative frameworks affecting the business.

It applies to individuals who are establishing or operating a micro business for self-employment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Describe business ideas	1.1 Gather information for business ideas from appropriate sources 1.2 List details of business ideas and opportunities 1.3 Research alternative business ideas in light of available

ELEMENT	PERFORMANCE CRITERIA
	resources 1.4 Specify and list products and services to match business ideas 1.5 Identify and research potential customer information for business ideas 1.6 Identify and take into account available financial, digital technology, business and technical skills when researching business opportunities
2. Identify market needs	2.1 Collect information regarding market size and potential from appropriate sources 2.2 Investigate market trends and developments to identify market needs relative to business ideas 2.3 Gather market information from primary and secondary sources to identify possible market needs in relation to business ideas 2.4 Identify ethical and cultural requirements of the market, and their relevance for business ideas 2.5 Identify new and emerging markets and document their features 2.6 Identify and organise information on expected market growth or decline and associated risk factors
3. Investigate factors affecting the market	3.1 Identify projected changes in population, economic activity and labour force that may impact business ideas 3.2 Identify movements in prices, and projected changes in availability of resources 3.3 Review trends and developments and identify their potential impact on business ideas

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.5, 2.1-2.6, 3.1-3.3	Analyses and evaluates textual information to develop research strategies, integrate facts and ideas and meet

		business requirements
Writing	1.1, 1.2, 1.4, 1.5, 2.3, 2.5	Uses factual information and industry related terminology to complete required documentation
Oral Communication	1.1, 1.5, 2.3, 2.5	Clearly articulates requests using specific and relevant language, and uses listening and questioning techniques to confirm understanding
Numeracy	2.1, 3.1, 3.2	Extracts, evaluates and compares numerical information to determine resources and identify trends
Get the work done	1.1, 1.5, 1.6, 2.1, 2.2, 2.5, 2.6, 3.1, 3.2	- Identifies changes to processes, products or services within scope of own business opportunities - May invest time in developing and shaping several options before making a final choice, using a combination of lateral and analytical thinking to tailor and strengthen an idea to suit needs, resources and constraints - Uses a range of digitally based technology and applications to access and filter data, and then extract, organise, integrate and share relevant information in increasingly effective ways.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB301 Investigate micro business opportunities Release 2	BSBSMB301 Investigate micro business opportunities Release 1	Minor edits to clarify intent of unit	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB301 Investigate micro business opportunities

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- research and analyse information from a range of sources to investigate a business opportunity, including:
 - financial considerations
 - digital technologies
 - market size, potential and trends
 - ethical and cultural requirements of the market
 - resource availability
- review data for potential impact on the market, products, services and customers
- match products and services to the business opportunity.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- locate and outline legislation and regulation relevant to specific micro business opportunities being investigated
- identify sources of specialist advice on trends in new and emerging markets and decline and risk factors

- summarise benefits and challenges of digital technologies relevant to micro business opportunities
- describe appropriate business research methods and data collection tools and software.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- internet access for research
- data collection tools and software
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies, or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB401 Establish legal and risk management requirements of small business

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify and comply with all regulations affecting the business.

It applies to individuals operating a small business who use analytical skills to interpret legislation and regulations and develop procedures to manage compliance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify and implement business legal requirements	1.1 Identify and research possible options for the business legal structure using appropriate sources 1.2 Determine legislation and regulatory requirements affecting

ELEMENT	PERFORMANCE CRITERIA
	operations of the business under its chosen structure 1.3 Develop and implement procedures to ensure full compliance with relevant legislation and regulatory requirements
2. Comply with legislation, codes and regulatory requirements	2.1 Establish systems to ensure legal rights and responsibilities of the business are identified and the business is adequately protected, specifically in relation to work health and safety (WHS), business registration and environmental requirements 2.2 Identify taxation principles and requirements relevant to the business, and follow procedures to ensure compliance 2.3 Identify and carefully maintain legal documents and maintain and update relevant records to ensure their ongoing security and accessibility 2.4 Monitor provision of products and services of the business to protect legal rights and to comply with legal responsibilities 2.5 Conduct investigations to identify areas of non-compliance with legal and regulatory requirements, and take corrective action where necessary
3. Negotiate and arrange contracts	3.1 Seek legal advice on contractual rights and obligations, if required, to clarify business liabilities 3.2 Investigate and assess potential products and services to determine procurement rights and ensure protection of business interests where applicable 3.3 Negotiate and secure contractual procurement rights for goods and services including contracts with relevant people, as required, in accordance with the business plan 3.4 Identify options for leasing or ownership of business premises and complete contractual arrangements in accordance with the business plan
4. Identify and treat business risks	4.1 identify potential internal and external risks to the business 4.2 assess the probability and impact of identified risks 4.3 prioritise risks for treatment 4.4 develop actions to mitigate risks including identifying insurance requirements and adequate cover

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.4, 3.2-3.5	Identifies, analyses and evaluates a range of complex text to determine legislative, regulatory and related business requirements
Writing	1.3, 2.1, 2.3, 2.5, 3.1, 3.3, 3.5	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	2.5, 3.1, 3.3	- Uses specific and relevant language to clearly articulate legal issues, and uses questioning and listening techniques to clarify solutions - Participates in verbal negotiations using tone and language suitable to audience
Numeracy	2.2, 2.5, 3.3, 3.4	- Reviews, analyses, compares and contrasts numerical data which may be embedded in documents - Calculates business insurance costs and compares costing options
Navigate the world of work	1.2, 1.3, 2.1	Monitors adherence to organisational policies and legislative responsibilities and considers own role in terms of its contribution to broader goals of work environment
Interact with others	3.1, 3.3	Plays a lead role in situations requiring effective collaboration, demonstrating high-level influencing skills, focusing and shaping awareness, and engaging and motivating others
Get the work done	1.1-1.3, 2.1	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Implements actions as per plan, making adjustments if necessary and addressing unexpected issues - Understands importance of secure information and privacy in relation to own work and takes personal responsibility for identifying and managing risk factors - Makes a range of critical and non-critical decisions in complex situations, taking a range of constraints into account

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB401 Establish legal and risk management requirements of small business Release 2	BSBSMB401 Establish legal and risk management requirements of small business Release 1	Minor edits to clarify intent of unit	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB401 Establish legal and risk management requirements of small business

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- demonstrate a systematic approach to identifying, managing and meeting legal and regulatory requirements, specifically in regard to WHS, business registration and environmental requirements
- ensure compliance, by:
 - following taxation and industrial relations principles
 - updating and maintaining legal documents
 - investigating areas of non-compliance
 - monitoring provision of products and services
 - taking corrective action where necessary
- negotiate and arrange contracts, including:
 - seeking legal advice
 - investigating procurement rights
 - identifying options of leasing or ownership of business premises.
- Identify, assess and treat risks specific to the business including
 - prioritising risks with highest probability of occurrence and greatest negative impact on the business
 - identifying insurance requirements

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline business registration and licensing requirements
- identify all government legislative requirements relating to the specific business operation
- explain creation and termination of relevant legal contracts
- summarise relevant cultural differences and legal implications
- describe legal rights and obligations of alternative ownership structures
- outline necessary record keeping to meet minimum legal and taxation requirements
- summarise relevant consumer legislation and industry codes of practice
- outline the key steps in the risk management process
- explain relevant insurance requirements and products.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- office equipment and resources
- business technology including internet access
- specialist software for analysis of data
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies, or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB402 Plan small business finances

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify financial requirements of a business, including profit targets, cash flow projections and strategies to garner financial support.

It applies to individuals who operate a small business or work within an existing micro or small businesses and interpret financial data.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify costs, calculate prices and prepare profit statement	1.1 Identify and document costs associated with production and delivery of business products and services 1.2 Calculate prices based on costs and profit margin, as an hourly

ELEMENT	PERFORMANCE CRITERIA
	charge-out rate for labour or unit price for products 1.3 Calculate break-even sales point to establish business viability and profit margins 1.4 Identify appropriate pricing strategies in relation to market conditions to meet business profit targets 1.5 Prepare projected profit statement to supplement the business plan
2. Develop a financial plan	2.1 Set profit targets or goals to reflect owner's desired returns 2.2 Identify working capital requirements necessary to attain profit projections 2.3 Identify non-current asset requirements and consider alternative asset management strategies 2.4 Prepare cash flow projections to enable business operation in accordance with business plan and legal requirements 2.5 Identify capital investment requirements accurately for each operational period 2.6 Select budget targets to enable ongoing monitoring of financial performance
3. Acquire finance	3.1 Identify start-up and ongoing financial requirements according to financial plan/budget 3.2 Identify sources of finance, including potential financial backers, to provide required liquidity for the business to complement business goals and objectives 3.3 Investigate cost of securing finance on optimal terms 3.4 Identify strategies to obtain finance as required to ensure financial viability of the business

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.5, 2.1-2.5, 3.1,	Identifies, analyses and evaluates complex information from a range of sources

	3.2	
Writing	1.1, 1.5, 2.1, 2.4, 3.2	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	1.1, 3.2	- Uses specific and relevant language to secure finance and uses questioning and listening techniques to clarify outcomes - Participates in verbal negotiations using tone and language suitable to audience
Numeracy	1.1-1.5, 2.1, 2.2, 2.4-2.6, 3.1, 3.3, 3.4	Analyses numerical information to determine costs, prices, profit and losses, and other financial data
Navigate the world of work	2.4	Appreciates implications of legal and regulatory responsibilities related to own work
Get the work done	1.1, 1.4, 2.1-2.3, 2.5, 2.6, 3.1, 3.2, 3.4	- Sequences and schedules complex activities, including implementing and monitoring financial strategies - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account, making adjustments as necessary - Regularly uses formal thinking techniques to generate new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB402 Plan small business finances Release 2	BSBSMB402 Plan small business finances Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB402 Plan small business finances

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a financial plan which identifies financial requirements of the business, including cash flow projections and a projected profit statement
- follow the financial plan, including:
 - demonstrating an awareness of appropriate legal requirements
 - implementing strategies to monitor financial performance
- identify sources and investigate costs of securing appropriate financial assistance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain break-even analysis
- clarify costing for the business, including margin or mark-up, hourly charge-out rates and unit costs
- summarise financial decision-making relevant to the business
- outline methods and relative costs of obtaining finance
- summarise principles for preparing balance sheets
- provide a detailed explanation of:
 - principles for preparation of cash flow forecasts
 - principles for preparation of profit and loss statements

- purpose of financial reports
- explain relevant accounting terminology
- describe working capital cycles.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- software for financial calculations
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB403 Market the small business

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to monitor and improve business performance via a clear marketing strategy integrated into the business plan.

It applies to individuals who operate a small business independently or within a larger organisation. Individuals in this role analyse and interpret market data.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop marketing strategies	1.1 Analyse the business and its key products or services to determine focus of marketing activities, in accordance with objectives of the business plan 1.2 Evaluate customer base and target market for the small

ELEMENT	PERFORMANCE CRITERIA
	business as a basis for marketing objectives and strategies 1.3 Conduct a competitor analysis to inform development of marketing strategies 1.4 Determine marketing objectives in consultation with relevant people and in accordance with the business plan 1.5 Ensure strategies are ethically and culturally appropriate and aligned with customer and industry expectations
2. Determine a marketing mix for the business	2.1 Assess product mix, volumes and pricing opportunities to determine marketing focus and optimise profit 2.2 Evaluate costs and benefits of using different distribution channels or providing different levels of customer service, and consider results in determining marketing mix 2.3 Determine marketing and promotional activities including the role of digital engagement to suit target market 2.4 Consider the customer journey and conversations in determining marketing mix
3. Implement marketing strategies	3.1 Brief those involved in the marketing effort on their roles and responsibilities, to ensure success of marketing strategies 3.2 Plan and implement marketing activities, in accordance with marketing objectives and budgetary requirements 3.3 Consider digital devices, platforms and technologies for effectiveness in implementing marketing activities
4. Monitor and improve marketing performance	4.1 Monitor marketing activities and evaluate business performance according to objectives and targets of the business plan 4.2 Analyse performance gaps and take corrective action or set new targets 4.3 Encourage all relevant people to propose ways to improve marketing performance 4.4 Seek and analyse customer reaction to all aspects of the marketing mix, using culturally appropriate processes, to improve targeting and outcomes 4.5 Conduct ongoing research of customer requirements and expectations in both on-line and off-line environments to identify opportunities for change and improvement 4.6 Identify and respond to opportunities to aid business development through new technologies and different ways of

ELEMENT	PERFORMANCE CRITERIA
	marketing

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.2-2.4, 3.2, 4.1, 4.4, 4.6	Identifies, analyses and evaluates complex information from a range of sources
Writing	1.3, 2.3, 2.5, 3.1, 3.2, 4.4-4.6	Prepares reports and other workplace documentation using structure, layout and terminology appropriate to the audience
Oral Communication	1.3, 3.1, 4.3, 4.4	- Presents ideas and requirements clearly and using language and non-verbal techniques appropriate to audience and environment - Uses questioning and listening to check and confirm understanding
Numeracy	2.1, 2.2, 3.2, 4.2	- Analyses numerical information to determine budgetary requirements and product quantities - Uses a range of calculation methods to evaluate costs and benefits
Navigate the world of work	4.5	Regularly reviews current situation and develops strategies to address improvements in marketing performance
Interact with others	4.3	Recognises importance of building rapport to establish effective working relationships
Get the work done	1.1-1.3, 2.1-2.5, 3.2, 4.1, 4.2	- Takes responsibility for planning and organising own workload, identifying ways of sequencing and combining elements for greater efficiency - Implements actions as per plan, making slight adjustments if necessary and addressing some unexpected issues - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account - Identifies concepts, principles and features of approaches in use in other contexts, and redesigns

		these to suit own situation • Uses formal and informal processes to monitor implementation of solutions and reflect on outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB403 Market the small business Release 2	BSBSMB403 Market the small business Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
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Assessment Requirements for BSBSMB403 Market the small business

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- determine marketing activity focus in line with objectives of the business plan
- evaluate customer base
- understand what is ethically and culturally appropriate
- determine a marketing mix according to market and business needs, including:
 - ability to optimise sales and profit
 - ability to evaluate costs and benefits
 - determine customer needs and promotional activities
- determine marketing strategies, including briefing appropriate personnel on their responsibilities
- identify marketing opportunities in the digital environment
- develop approaches to engage, respond and monitor customers in the digital space
- monitor and evaluate activities and performance, and correct performance gaps
- consult and communicate effectively with relevant people
- research and monitor ongoing changes and improvements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss industry market trends
- identify performance evaluation methods
- explain methods of analysing costs and benefits of marketing strategies
- summarise methods of developing marketing objectives and marketing mix
- compare current digital devices, platforms and technologies for effectiveness in achieving marketing objectives
- outline methods of monitoring customer satisfaction
- identify relevant market analysis and research
- provide a detailed explanation of relevant marketing concepts and methods.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business technology
- software for analysis of data
- workplace documents and case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB404 Undertake small business planning

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to research and develop an integrated business plan for achieving business goals and objectives.

It applies to individuals who operate a small business that operates independently, or as part of a larger organisation. Individuals in this role interpret business information and numerical data competently.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify elements of the business plan	1.1 Identify purpose of the business plan 1.2 Identify and review essential components of the business plan 1.3 Identify and document business goals and objectives as a basis for measuring business performance

ELEMENT	PERFORMANCE CRITERIA
2. Develop a business plan	2.1 Research resources, legal and compliance requirements, specifically in relation to work health and safety (WHS), in accordance with business goals and objectives 2.2 Research market needs, and market size and potential 2.3 Identify sources and costs of finance, from financial plan, to provide required liquidity and profitability for the business 2.4 Identify methods, from marketing strategies, to promote market exposure of the business 2.5 Identify methods or means of production or operation from production or operations plan to conform with business goals and objectives 2.6 Identify staffing requirements to effectively produce or deliver products and services 2.7 Identify, assess and prioritise internal and external risks 2.8 Identify specialist services and sources of advice, where required, and cost in accordance with available resources
3. Develop strategies for minimising risks	3.1 Identify specific interests and objectives of relevant people and seek and confirm their support of planned business direction 3.2 Identify and develop risk management strategies according to business goals and objectives, and relevant legal requirements 3.3 Develop a contingency plan to address possible areas of non-conformance with the plan

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.1-2.7, 3.1, 3.2	Identifies, analyses and evaluates complex workplace documentation during planning process
Writing	1.3, 2.3-2.7, 3.1-3.3	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral	1.1, 3.1	Articulates ideas and requirements clearly and

Communication		creatively based on techniques appropriate to assess business performance
Numeracy	2.2, 2.3, 2.5-2.7	Interprets numerical information to determine prospective markets, resource allocations and business profits/losses
Navigate the world of work	2.1, 3.2	Appreciates implications of legal and regulatory responsibilities related to own work
Interact with others	3.1	Looks for strengths in others, finding ways of working with and building on these and sharing own knowledge and experience freely
Get the work done	1.1, 1.2, 2.1-2.7, 3.2, 3.3	- Uses a combination of formal, logical planning processes and an increasingly intuitive understanding of context to identify relevant information and to evaluate alternative strategies - Implements actions as per plan, making slight adjustments if necessary, and addressing some unexpected issues - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account - Identifies concepts, principles and features of approaches in use in other contexts, and redesigns these to suit own situation - Uses formal and informal processes to monitor implementation of solutions and reflect on outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB404 Undertake small business planning Release 2	BSBSMB404 Undertake small business planning Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB404 Undertake small business planning

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop a business plan which provides for finance, marketing and provision of products or services to facilitate all business goals and objectives
- identify and plan all work health and safety (WHS) and duty of care responsibilities
- identify and assess internal and external risks to the business
- develop risk management strategies including a contingency plan for non-conformance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss all government legislative requirements relating to business operation, especially in regard to WHS and environmental issues, equal employment opportunity, industrial relations and anti-discrimination
- explain methods of evaluation
- summarise WHS responsibilities and procedures for identifying hazards relevant to the business
- outline planning processes
- describe preparation of a business plan
- identify principles of risk management relevant to small business planning
- outline common risks particular to the small business type or industry
- explain reasons for, and benefits of, business planning

- clarify relevant industry codes of practice
- outline setting goals and objectives
- explain types of business planning – feasibility studies; strategic, operational, financial and marketing planning.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business equipment and resources
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB405 Monitor and manage small business operations

Modification History

Release	Comments
Release 3	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 2	This version first released with BSB Business Services Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement a business plan and modify operations as required.

It applies to individuals who operate a small business which stands alone, or is part of a department within a larger organisation. Individuals in this role use problem-solving skills and take responsibility for developing approaches to manage business operations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the</i>	<i>Performance criteria describe the performance needed to</i>

ELEMENT	PERFORMANCE CRITERIA
<i>essential outcomes.</i>	<i>demonstrate achievement of the element.</i>
1. Develop operational strategies and procedures	1.1 Develop an action plan to provide a clear and coherent direction, in accordance with business goals and objectives 1.2 Identify work health and safety (WHS) and environmental issues, and implement strategies to minimise risk factors 1.3 Develop a quality system for the business in line with industry standards, compliance requirements and cultural criteria 1.4 Develop performance measures and operational targets to conform with the business plan 1.5 Develop strategies for innovation, including utilisation of existing, new or emerging technologies, where practicable, to optimise business performance
2. Implement operational strategies and procedures	2.1 Implement systems and key performance indicators or targets to monitor business performance and customer satisfaction 2.2 Implement systems to control stock, expenditure or cost, wastage or shrinkage and risks to health and safety in accordance with the business plan 2.3 Maintain staffing requirements, where applicable, within budget, to maximise productivity 2.4 Carry out provision of goods or services in accordance with established legal, ethical cultural and technical standards 2.5 Provide goods or services in accordance with time, cost and quality specifications, and customer requirements 2.6 Apply quality procedures to address product or service and customer requirements
3. Monitor business performance	3.1 Regularly monitor and review achievement of operational targets to ensure optimum business performance, in accordance with business plan goals and objectives 3.2 Review systems and structures, with a view to more effectively supporting business performance 3.3 Investigate and analyse operating problems to establish causes and implement changes as required, as part of the business quality system 3.4 Amend operational policies and procedures to incorporate corrective action
4. Review business operations	4.1 Review and adjust business plan, as required, to maintain business viability, in accordance with business goals and

ELEMENT	PERFORMANCE CRITERIA
	objectives 4.2 Clearly record proposed changes to aid future planning and evaluation 4.3 Undertake ongoing research into new business opportunities and adjust business goals and objectives as new business opportunities arise

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.5, 2.1, 2.2, 2.4, 2.5, 3.1, 4.1	Evaluates complex text to determine legislative, regulatory and workplace documentation
Writing	1.1, 1.3-1.5, 3.2, 3.4, 4.1, 4.2	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	3.2	Articulates clearly using specific and relevant language suitable to audience to convey requirements, and employs listening and questioning techniques to confirm understanding
Numeracy	2.2, 2.3, 2.5	Interprets numerical information to manage performance information and regulate cash flow
Navigate the world of work	1.1-1.3, 2.2, 2.4, 4.1	- Monitors adherence to organisational policies and procedures and considers own role for its contribution to broader goals of the work environment - Appreciates implications of legal and regulatory responsibilities related to own work with specific reference to safety
Get the work done	1.1, 1.3-1.5, 2.1-2.3, 2.5, 2.6, 3.1-3.3, 4.1, 4.3	- Reflects on how digital systems and tools are used or could be used to achieve work goals, and begins to recognise strategic and operational applications - Identifies concepts, principles and features of approaches in use in other contexts and considers how these may suit own situation - Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may

		contribute to longer-term operational and strategic goals • Uses each experience to reflect on how variables impact decision outcomes, and to gain insights into what constitutes 'good' judgement and an effective decision in different contexts • Recognises and addresses some unfamiliar problems of increasing complexity within own scope

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB405 Monitor and manage small business operations Release 3	BSBSMB405 Monitor and manage small business operations Release 2	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB405 Monitor and manage small business operations

Modification History

Release	Comments
Release 3	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 2	This version first released with BSB Business Services Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- develop strategies and procedures to successfully manage business operations, including:
 - developing an action plan
 - identifying risk management procedures
 - developing a quality system
 - implementing performance measures
 - utilising technologies to optimise business performance
- implement and monitor strategies and procedures developed, including:
 - analysing and correcting business problems
 - reviewing and adjusting the business plan
- record and research business improvements
- make appropriate adjustments to business operations as required.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- summarise relevant industry codes of practice
- explain methods for implementing operation and revenue control systems
- summarise methods for monitoring performance and implementing improvements
- outline work health and safety (WHS) responsibilities and procedures for managing hazards
- identify relevant principles of risk management, including risk assessment
- clarify quality system principles and methods
- summarise relevant performance measures
- discuss role of innovation
- outline systems to manage staff, stock, expenditure, services and customer service
- identify technical or specialist skills relevant to business operations.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business equipment and resources
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB406 Manage small business finances

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to implement and review financial management strategies on a regular basis.

It applies to individuals who operate a small business that stands alone, or is part of a department within a larger organisation. Individuals in this role interpret financial reports and other numerical data to develop financial management strategies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Implement financial plan	1.1 Identify financial information requirements and obtain specialist services, as required, to profitably operate the business in accordance with the business plan 1.2 Produce financial budgets or projections, including cash flow

ELEMENT	PERFORMANCE CRITERIA
	estimates, as required for each forward period, and distribute to relevant people in accordance with legal requirements 1.3 Negotiate, secure and manage business capital to best enable implementation of the business plan and to meet requirements of financial backers 1.4 Develop and maintain strategies to enable adequate financial provision for taxation in accordance with legal requirements 1.5 Develop, monitor and maintain client credit policies, including contingencies for debtors in default, to maximise cash flow 1.6 Select key performance indicators to enable ongoing monitoring of financial performance 1.7 Record and communicate financial procedures to relevant people to facilitate implementation of the business plan
2. Monitor financial performance	2.1 Regularly monitor and report on financial performance targets, and analyse data to establish extent to which the financial plan has been met 2.2 Monitor marketing and operational strategies for their effects on the financial plan 2.3 Calculate and evaluate financial ratios according to own or industry benchmarks 2.4 Assess financial plan to determine whether variations or alternative plans are needed, and change as required

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 2.1, 2.4	Evaluates complex text to determine legislative, regulatory and workplace documentation
Writing	1.2-1.5, 1.7, 2.1	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	1.3, 1.7, 2.1	Articulates clearly using specific and relevant language suitable to audience to convey requirements, and employs listening and questioning techniques to

		confirm understanding Participates in verbal negotiations using tone and language suitable to audience
Numeracy	1.1-1.5, 2.1, 2.3, 2.4	Interprets numerical information to calculate all relevant financial information
Navigate the world of work	1.2, 1.4	Appreciates implications of legal and regulatory responsibilities related to own work
Interact with others	1.7, 2.1	Selects appropriate form, channel and mode of communication for a specific purpose relevant to own role
Get the work done	1.1, 1.2, 1.4-1.6, 2.2, 2.4	- Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer-term operational and strategic goals - Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account - Uses formal and informal processes to monitor implementation of ideas and reflect on outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB406 Manage small business finances Release 2	BSBSMB406 Manage small business finances Release 1	Updated to clarify intent	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
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Assessment Requirements for BSBSMB406 Manage small business finances

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- operate the business according to the business plan, including:
 - adhering to legal requirements
 - meeting requirements of financial backers
 - defining strategies for debt collection and contingencies for debtors
 - managing cash flow
 - defining key performance indicators
 - communicating with relevant people
- monitor the business against financial plan and make changes as required.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss benchmarking
- explain financial decision-making relevant to the business
- summarise significant financial indicators
- outline purposes of financial reports
- clarify preparation and interpretation of budget/actual reports
- identify principles for preparing balance sheets and their interpretation
- outline debt collection procedures or strategies

- characterise principles for preparing profit and loss statements and their interpretation
- discuss stock records and stock control relevant to the business.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business equipment and resources
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSMB407 Manage a small team

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select, induct, train and develop staff members to enhance business operations within the parameters of all relevant legislative requirements.

It applies to individuals who operate a small business that stands alone, or is part of a department within a larger organisation. Individuals in this role have a good knowledge of industrial relations and team management and use effective, responsive and supportive communication in workplace interactions.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Management and Leadership – Small and Micro Business

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop staffing plan	1.1 Determine staffing requirements to allow the business to run effectively, in accordance with requirements outlined in the

ELEMENT	PERFORMANCE CRITERIA
	business plan 1.2 Identify and compare existing skills of owner/s and staff with business requirements to identify any gaps 1.3 Develop policies and procedures for owner/s and staff, in accordance with the business plan
2. Recruit, induct, train and retain team	2.1 Develop job or position descriptions, competencies required and selection criteria to meet business' needs 2.2 Judge information obtained from each candidate against specified selection criteria, and select according to business needs and legal requirements 2.3 Induct new staff members in accordance with policies and procedures of the business 2.4 Make team members aware of their responsibilities and performance requirements as soon as practicable, and take opportunities to coach team members who are unfamiliar with procedures of the business 2.5 Develop and implement a staff development program and career paths based on requirements of business and staff competencies 2.6 Advertise staff vacancies appropriately in accordance with staffing plan
3. Comply with industrial relations obligations	3.1 Clarify workplace rights and obligations of employers and employees, in accordance with legal requirements and codes of practice 3.2 Counsel staff, if required, in a positive and constructive manner and record outcomes accurately
4. Maintain staff records	4.1 Develop staff records system to provide timely and accurate information, in accordance with confidentiality, legal and taxation requirements 4.2 Monitor and accurately maintain system for recording and retrieving personnel and payroll information, and seek specialist advice where required
5. Manage staff	5.1 Regularly review contribution and skills of self and other team members to ensure performance is in line with agreed performance measures 5.2 Monitor and adjust staffing requirements to respond to any changes in tasks and functions required by the business 5.3 Support and encourage staff, and acknowledge and reward

ELEMENT	PERFORMANCE CRITERIA
	their contribution 5.4 Regularly provide opportunities for staff to discuss work related issues 5.5 Develop contingency plans to cope with unexpected or extreme situations and take appropriate corrective action as required
6. Review team performance	6.1 Develop positive and constructive relationships with and between team members 6.2 Review and update team objectives in support of business goals on a regular basis in consultation with team members 6.3 Identify strengths and weaknesses of team against current and expected work requirements 6.4 Schedule time, on a regular basis, for team members to review work operations to maintain and improve operational efficiency 6.5 Encourage team members to monitor their own performance, suggest improvements and identify professional development needs, in accordance with personal and business requirements 6.6 Monitor and review staff turnover rate

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 2.2, 2.3, 2.5, 2.6, 3.1, 4.1, 5.1, 6.3, 6.5, 6.6	Evaluates complex text to determine legislative, regulatory and workplace documentation
Writing	1.3, 2.1-2.6, 3.1, 3.2, 4.1, 4.2, 5.5, 6.1-6.3, 6.5	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	1.2, 2.2-2.4, 3.1, 3.2, 4.2, 5.3, 5.4, 6.1, 6.2, 6.4, 6.5	- Articulates clearly using specific and relevant language suitable to audience to convey requirements, and employs listening and questioning techniques to confirm understanding - Participates in verbal negotiations and coaching using tone and language suitable to audience

Numeracy	6.4	• Uses basic mathematical formulas to review staff performances within available work schedules
Navigate the world of work	1.3, 2.2, 3.1, 4.1	• Understands own legal rights and responsibilities and is extending understanding of general legal principles across work contexts • Monitors adherence to organisational policies and procedures and considers own role for its contribution to broader goals of the work environment
Interact with others	2.4, 2.6, 5.3, 6.1, 6.5	• Collaborates with others to achieve joint outcomes, playing an active role in facilitating effective group interaction, influencing direction and taking a leadership role on occasion • Looks for ways of establishing connections and building genuine understanding with a diverse range of people • Actively identifies important communication exchanges, selecting appropriate channels, format, tone and context to suit purpose and audience, and monitors impact
Get the work done	1.1, 1.2, 2.2, 2.3, 2.5, 4.2, 5.1, 5.2, 5.5, 6.3, 6.6	• Uses digital technologies and systems safely, legally and ethically when gathering, storing, accessing and sharing information • Develops plans to manage relatively complex, non-routine tasks with an awareness of how they may contribute to longer-term operational and strategic goals • Makes a range of critical and non-critical decisions in relatively complex situations, taking a range of constraints into account • Uses formal and informal processes to monitor implementation of ideas and reflect on outcomes • Recognises and anticipates an increasing range of familiar problems, their symptoms and causes, actively looking for early warning signs and implementing contingency plans

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSMB407 Manage a small team Release 2	BSBSMB407 Manage a small	Updated to clarify intent	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
	team Release 1		

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSMB407 Manage a small team

Modification History

Release	Comments
Release 2	This version released with BSB Business Services Training Package Version 2.0. Version created to clarify intent of unit
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use the business plan to:
 - determine staffing requirements
 - coordinate skill-gap training where required
 - develop human resource policies and procedures
- develop job descriptions and selection criteria
- determine induction processes
- implement staff development program
- adhere to legal requirements and codes of practice
- develop staff records system
- conduct ongoing performance measures
- communicate effectively with staff members
- develop contingency plans
- develop strategies to review team performance
- monitor and review staff.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- discuss all government legislative requirements relating to staffing the business operation

- explain work health and safety (WHS) responsibilities and procedures for managing hazards
- summarise relevant industry awards or enterprise agreements
- outline staff development pathways
- identify training course options for staff development
- summarise staff counselling, grievance and disciplinary procedures
- identify unfair dismissal legislation and procedures.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the Management and Leadership – Small and Micro Business field of work and include access to:

- business equipment and resources
- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBSUS401 Implement and monitor environmentally sustainable work practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 2.0. Version created to better align unit to AQF level.

Application

This unit describes the skills and knowledge required to effectively analyse the workplace in relation to environmentally sustainable work practices and to implement improvements and monitor their effectiveness.

It applies to individuals with responsibility for a specific area of work or who lead a work group or team and addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices, including the development of processes and tools.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Sustainability

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Investigate current practices in relation to resource usage	1.1 Identify environmental regulations applying to the enterprise 1.2 Analyse procedures for assessing compliance with

ELEMENT	PERFORMANCE CRITERIA
	environmental/sustainability regulations 1.3 Collect information on environmental and resource efficiency systems and procedures, and provide to the work group where appropriate 1.4 Collect, analyse and organise information from a range of sources to provide information/advice and tools/resources for improvement opportunities 1.5 Measure and document current resource usage of members of the work group 1.6 Analyse and document current purchasing strategies 1.7 Analyse current work processes to access information and data to assist in identifying areas for improvement
2. Set targets for improvements	2.1 Seek input from stakeholders, key personnel and specialists 2.2 Access external sources of information and data as required 2.3 Evaluate alternative solutions to workplace environmental issues 2.4 Set efficiency targets
3. Implement performance improvement strategies	3.1 Source and use appropriate techniques and tools to assist in achieving efficiency targets 3.2 Apply continuous improvement strategies to own work area of responsibility, including ideas and possible solutions to communicate to the work group and management 3.3 Implement and integrate environmental and resource efficiency improvement plans for own work group with other operational activities 3.4 Supervise and support team members to identify possible areas for improved practices and resource efficiency in work area 3.5 Seek suggestions and ideas about environmental and resource efficiency management from stakeholders and act upon where appropriate 3.6 Implement costing strategies to fully utilise environmental assets
4. Monitor performance	4.1 Use and/or develop evaluation and monitoring, tools and technology 4.2 Document and communicate outcomes to report on efficiency targets to key personnel and stakeholders 4.3 Evaluate strategies and improvement plans 4.4 Set new efficiency targets, and investigate and apply new tools

ELEMENT	PERFORMANCE CRITERIA
	and strategies 4.5 Promote successful strategies and reward participants where possible

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.4, 1.6, 1.7, 2.3, 3.1	- Identifies and analyses complex texts to determine legislative, regulatory and business requirements - Reviews reported information to evaluate workplace strategies and improvement practices
Writing	1.5, 1.6, 2.1, 2.2, 2.4, 3.1-3.3, 4.4, 4.5	- Documents findings of investigations from written and oral sources according to organisational requirements - Provides updates about progress using formats and language appropriate to the audience and context
Oral Communication	2.1, 2.2, 3.3-3.5, 4.4, 4.5	- Presents information and seeks advice using structure and language appropriate to audience - Participates in discussions using listening and questioning to elicit the views of others and to clarify or confirm understanding
Numeracy	1.5, 2.4, 3.1, 3.6, 4.4	Analyses numerical information to measure usage and calculates metric measurements, quantities/ratios and financial data using appropriate tools
Navigate the world of work	1.1, 1.2	Recognises and follows legislative requirements and organisational policies and procedures associated with own role
Interact with others	1.3, 2.1, 2.2, 3.3-3.5, 4.2, 4.4, 4.5	- Selects and uses appropriate conventions and protocols when communicating with internal and external stakeholders to seek or share information - Collaborates and consults with a range of stakeholders to achieve shared understanding of individual roles in meeting objectives
Get the work done	1.2, 1.4-1.7, 2.3, 2.4, 3.1, 3.2, 3.3, 3.5, 3.6, 4.1, 4.3, 4.4	- Develops plans to manage routine and non-routine tasks for own work group with an awareness of how they contribute to the broader organisation - Uses systematic, analytical processes to set

		environmental targets, gather relevant information, identify and evaluate alternative approaches • Evaluates outcomes of decisions to identify opportunities for improvement • Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSUS401 Implement and monitor environmentally sustainable work practices	BSBSUS301 Implement and monitor environmentally sustainable work practices	Recoded to meet AQF standards	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBSUS401 Implement and monitor environmentally sustainable work practices

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 2.0. Version created to better align unit to AQF level.

Performance Evidence

Evidence of the ability to:

- analyse information from a range of sources to identify current procedures, practices and compliance requirements in relation to environmental and resource sustainability
- consult and communicate with relevant stakeholders to seek input and encourage engagement with developing and implementing sustainability improvements, encourage feedback and suggestions and report on outcomes
- plan and organise work group activities to:
 - measure current resource usage
 - solve problems and generate ideas for improvements
 - evaluate and implement strategies to improve resource usage
 - plan, implement and integrate improvements into operations
 - meet environmental requirements
- apply continuous improvement approach to sustainability performance
- apply change management techniques to support sustainability performance.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify relevant internal and external sources of information and explain how they can be used to identify sustainability improvements

- explain the compliance requirements for the work area with reference to legislation, regulations, codes of practice and workplace procedures that relate to environmental and resource issues
- outline common environmental and energy efficiency issues within the industry
- give examples of benchmarks for environmental and resource sustainability that are relevant to the organisation
- outline organisational systems and procedures that relate to environmental and resource sustainability improvements including:
 - supply chain, procurement and purchasing
 - quality assurance
 - making recommendations and seeking approvals

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the sustainability field of work and include access to:

- relevant legislation, regulations, standards and codes
- relevant workplace documentation and resources
- case studies or, where possible, real situations
- interaction with others.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR204 Use business technology

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to select and use computer software and organise electronic information and data.

It applies to individuals who apply a limited range of practical skills with a fundamental knowledge of equipment use and the organisation of data in a defined context, under direct supervision or with limited individual responsibility.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and use technology	1.1 Select appropriate technology and software applications to achieve requirements of the task 1.2 Adjust workspace, furniture and equipment to suit user's ergonomic requirements 1.3 Use technology according to organisational requirements and in a way that promotes a safe work environment
2. Process and organise	2.1 Identify, open, generate or amend files and records according

ELEMENT	PERFORMANCE CRITERIA
data	to task and organisational requirements 2.2 Operate input devices according to organisational requirements 2.3 Store data appropriately and exit applications without damage to or loss of, data 2.4 Use manuals, training booklets and/or online help or helpdesks to overcome basic difficulties with applications
3. Maintain technology	3.1 Identify and replace used technology consumables in accordance with manufacturer's instructions and organisational requirements 3.2 Carry out and/or arrange routine maintenance to ensure equipment is maintained in accordance with manufacturer's instructions and organisational requirements 3.3 Identify equipment faults accurately and take action in accordance with manufacturer's instructions or report fault to designated person

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.3, 2.1, 2.2, 2.4, 3.1-3.3	Recognises and interprets information from familiar sources to determine job role and task requirements
Writing	2.1, 2.3, 3.2, 3.3	- Produces and amends files to meet task and organisational requirements - Completes required documentation using organisational formats
Oral Communication	3.3	Uses specific and relevant language to refer faults to others
Navigate the world of work	1.2, 1.3, 2.1, 2.2, 3.1-3.3	Recognises and follows legislative requirements and organisational policies and procedures associated with own role
Get the work done	1.1, 1.3, 2.1-2.4, 3.1-3.3	- Uses business technologies and systems safely, when gathering, storing, accessing and sharing information - Understands purposes, specific functions and key

		- features of common digital systems and business tools - Operates digital systems and business tools effectively to complete routine tasks using some basic troubleshooting strategies as required

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR204 Use business technology	BSBWOR204A Use business technology	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR204 Use business technology

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- select and use technology safely and according to organisational requirements
- access, retrieve and store required data
- demonstrate basic maintenance on a range of equipment using manuals or help-files
- identify and address faults according to requirements.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the organisation's work health and safety requirements
- outline the organisation's requirements for file naming and storage
- explain why regular back-ups of data are done
- list 'routine maintenance' tasks
- summarise the procedure for addressing equipment faults.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability – workplace effectiveness field of work and include access to:

- office equipment and resources
- electronic files and data
- workplace documentation and equipment manuals
- case studies and, where possible, real situations

- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR403 Manage stress in the workplace

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to identify signs and sources of stress within job roles and according to key performance indicators (KPIs). Management strategies to aid recovery from stressful situations are also essential.

It applies to individuals who work at a managerial level, have excellent communication skills and apply knowledge of organisational policies, occupational health and safety (OHS) and other relevant legislation.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Develop and implement personal stress management strategy	1.1 Recognise signs and sources of stress 1.2 Use appropriate techniques to manage own stress 1.3 Maintain personal stamina and resilience 1.4 Maintain personal work/life balance 1.5 Become a role model in managing stress and time
2. Develop stress	2.1 Analyse and understand potential sources of fatigue and stress

ELEMENT	PERFORMANCE CRITERIA
management strategies and techniques within a team	in the work environment 2.2 Develop an understanding of a range of stress management techniques within a team 2.3 Develop techniques to support achievement of key performance indicators (KPIs) and priorities 2.4 Encourage team members to support each other in managing stress 2.5 Adopt strategies to effectively reduce, manage and deal with stress within a team 2.6 Adopt stamina management strategies to maximise performance 2.7 Develop techniques to assist team members to recover effectively from a stressful or difficult situation
3. Implement stress management techniques within a team	3.1 Adopt work routine and procedural strategies to minimise stress and fatigue within a team 3.2 Use appropriate time management tools and techniques 3.3 Develop individual/group training and development program as required 3.4 Use team meetings and other opportunities to discuss stress management techniques and coach staff in using these techniques 3.5 Regularly evaluate tools, techniques and strategies 3.6 Develop team awareness of sources of internal and external support
4. Develop team and morale building strategies	4.1 Develop a strategy to engage and develop team members 4.2 Develop a communication strategy within a team 4.3 Manage and use team meetings effectively 4.4 Develop a supportive and responsive team environment 4.5 Delegate effectively to further empower and motivate team members
5. Monitor and address stress levels within a team	5.1 Monitor individual staff performance against performance requirements 5.2 Conduct regular staff reviews to identify variations and difficulties impacting work requirements 5.3 Monitor and support team members when in stressful situations 5.4 Respond appropriately to behavioural signs of stress among

ELEMENT	PERFORMANCE CRITERIA
	team members 5.5 Monitor work/life balance of team members 5.6 Discuss outcomes and develop action plans with team members as appropriate

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	2.3, 3.3, 5.1	Analyses and compares specific and complex text to determine and distinguish requirements
Writing	3.2, 3.3, 4.1, 4.2, 5.2, 5.6	- Develops documents that clearly explain ideas and advice - Records information using required tools
Oral Communication	2.4, 3.4, 3.6, 5.2, 5.4, 5.6	- Provides advice and information using language and features suitable to the audience in group and individual meetings - Uses listening and questioning techniques to confirm understanding
Numeracy	3.2	Interprets mathematical information related to timelines
Navigate the world of work	2.1	Understands legislative responsibility to provide a safe working environment
Interact with others	1.5, 2.4, 3.6, 4.3, 4.4, 4.5, 5.2, 5.4, 5.6	- Understands how own behaviour impacts others and leads by example - Establishes and builds rapport and relationships with team members - Provides effective support, feedback and coaching in difficult or tense situations
Get the work done	1.2, 2.1, 2.2, 2.3, 2.5, 2.6, 2.7, 3.1-3.5, 3.6, 4.1, 4.2, 4.4, 4.5, 5.1-5.5	- Plans and monitors tasks to ensure deadlines are met and competing demands are accommodated - Establishes, implements and monitors strategies, development plans and actions for team members - Uses problem-solving techniques to analyse and address issues that arise

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR403 Manage stress in the workplace	BSBWOR403A Manage stress in the workplace	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR403 Manage stress in the workplace

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- use appropriate techniques and strategies to manage own stress
- identify potential sources of fatigue or stress in the work environment
- assist team members to develop and use strategies to manage or minimise stress
- build team morale and cohesion
- monitor performance and stress levels of team members, and respond appropriately.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- describe signs and sources of stress and fatigue
- summarise stress management and reduction techniques
- summarise stamina management techniques
- explain the relationship between time management and stress
- explain the requirements under work health and safety (WHS) legislation to address workplace stress.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability – workplace effectiveness field of work and include access to:

- workplace equipment and resources
- organisational policies and procedures for stress management
- relevant legislation on health and safety

- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWOR404 Develop work priorities

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to monitor and obtain feedback on own work performance and access learning opportunities for professional development.

This unit applies to individuals who are required to design their own work schedules and work plans and to establish priorities for their work. They will typically hold some responsibilities for the work of others and have some autonomy in relation to their own role.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Workplace Effectiveness

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and complete own work schedule	1.1 Prepare workgroup plans which reflect consideration of resources, client needs and workgroup targets 1.2 Analyse and incorporate work objectives and priorities into personal schedules and responsibilities

ELEMENT	PERFORMANCE CRITERIA
	1.3 Identify factors affecting the achievement of work objectives and establish contingencies and incorporate them into work plans 1.4 Efficiently and effectively use business technology to manage and monitor planning completion and scheduling of tasks
2. Monitor own work performance	2.1 Identify and analyse personal performance through self-assessment and feedback from others on the achievement of work objectives 2.2 Seek and evaluate feedback on performance from colleagues and clients in the context of individual and group requirements 2.3 Routinely identify and report on variations in the quality of service and performance in accordance with organisational requirements
3. Co-ordinate professional development	3.1 Assess personal knowledge and skills against organisational benchmarks to determine development needs and priorities 3.2 Research and identify sources and plan for opportunities for improvement in consultation with colleagues 3.3 Use feedback to identify and develop ways to improve competence within available opportunities 3.4 Identify, access and complete professional development activities to assist career development 3.5 Store and maintain records and documents relating to achievements and assessments in accordance with organisational requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	3.1, 3.2, 3.3, 3.4	Develops strategies to reflect on own performance, obtain feedback, and plan and source professional development opportunities
Reading	1.2, 2.1, 2.3, 3.1, 3.5	Recognises and interprets textual information from relevant sources to understand organisation's policies and practices

Writing	1.1, 1.3, 2.2, 2.3, 3.2, 3.5	Prepares written reports and workplace documentation that communicate complex information clearly and effectively
Oral Communication	2.2, 2.3, 3.2	- Provides or seeks information using language suitable to audience and context - Employs listening and questioning techniques to confirm understanding
Numeracy	1.1, 1.2, 1.3	Interprets numerical information related to budgets and timeframes
Navigate the world of work	1.2, 2.1, 2.3, 3.1, 3.5	Identifies and understands roles and responsibilities in relation to organisational objectives, policies and procedures
Interact with others	2.2, 2.3, 3.2	- Selects and uses appropriate practices when communicating with internal and external stakeholders to seek or share information - Establishes and builds rapport and relationships with others to foster a culture of trust and honesty in communications
Get the work done	1.1-1.4, 2.3, 3.1, 3.2, 3.4, 3.5	- Plans, organises and implements tasks to meet organisational requirements - Systematically gathers and analyses information and evaluates options in order to anticipate potential problems and develop contingency plans - Uses the main features and functions of digital technologies and tools to complete work tasks efficiently and effectively

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWOR404 Develop work priorities	BSBWOR404B Develop work priorities	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWOR404 Develop work priorities

Modification History

Release	Comments
Release 2	This version first released with BSB Business Services Training Package Version 1.1. Version created to correct mapping table information
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- prepare and communicate own work plan
- schedule work objectives and tasks to support the achievement of the workgroup goals
- review own work performance against workgroup objectives through self-assessment and seeking and acting on feedback from clients and colleagues
- plan and access learning opportunities to extend personal work competencies.

Note: if a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- explain how business technology applications can be used to schedule tasks and plan work
- explain techniques to prepare personal plans and establish priorities
- identify methods to identify and prioritise personal learning needs
- outline a range of professional development options
- explain methods to elicit, analyse and interpret feedback
- provide a detailed explanation of methods that can be used to evaluate own performance.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the industry capability - workplace effectiveness field of work and include access to:

- workplace documentation including policies and procedures, and benchmarks for work group productivity and performance
- workplace equipment and resources
- case studies and, where possible, real situations
- interaction with others.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWRT301 Write simple documents

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to plan, draft and finalise a basic document.

It applies to individuals who apply a broad range of competencies in various work contexts and may exercise some discretion and judgement to produce a range of workplace documentation.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Communication – Writing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan document	1.1 Determine audience and purpose for the document 1.2 Determine the format and structure 1.3 Establish key points for inclusion 1.4 Identify organisational requirements 1.5 Establish method of communication 1.6 Establish means of communication

ELEMENT	PERFORMANCE CRITERIA
2 Draft document	2.1 Develop draft document to communicate key points 2.2 Obtain and include any additional information that is required
3 Review document	3.1 Check draft for suitability of tone for audience, purpose, format and communication style 3.2 Check draft for readability, grammar, spelling, and sentence and paragraph construction 3.3 Check draft for sequencing and structure 3.4 Check draft to ensure it meets organisational requirements 3.5 Ensure draft is proofread, where appropriate, by supervisor or colleague
4 Write final document	4.1 Make and proofread necessary changes 4.2 Ensure document is sent to intended recipient 4.3 File copy of document in accordance with organisational policies and procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1-1.3, 3.1-3.4, 4.1	- Recognises and interprets a variety of text to determine and confirm task requirements - Proofreads documents checking for grammar, spelling, structure, and suitability of style and format for audience
Writing	2.1, 2.2, 3.1-3.5, 4.1	Produces and edits basic documents, according to organisational requirements, for a given audience and purpose
Oral Communication	2.2, 3.5	Uses listening and questioning skills to seek additional information or confirmation of task completion
Navigate the world of work	1.4, 3.4, 4.3	Understands and complies with organisational policies and procedures

Interact with others	2.2, 3.5	Follows accepted communication practices and protocols when seeking information or feedback from others
Get the work done	1.1-1.6, 2.1, 2.2, 3.4, 3.5, 4.1-4.3	- Takes responsibility for planning, sequencing and prioritising tasks to achieve required outcomes - Uses the main features and functions of digital tools to complete work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWRT301 Write simple documents	BSBWRT301A Write simple documents	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWRT301 Write simple documents

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0

Performance Evidence

Evidence of the ability to:

- plan, draft and finalise three different simple documents that accurately convey the required basic information in a format suitable for the intended audience and in accordance with organisational policies and procedures for document production.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the process for checking basic grammar, spelling and punctuation
- describe different communication methods
- describe how audience, purpose and method of communication influence the tone of a document.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the communication – writing field of work and include access to:

- office equipment and resources to assist in document production
- organisational policies and procedures
- examples of documents to review.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

BSBWRT401 Write complex documents

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Application

This unit describes the skills and knowledge required to plan documents, draft text, prepare final text and produce documents of some complexity.

It applies to individuals who work in a range of business environments and are skilled in the creation of reports, information and general promotion documents that are more complex than basic correspondence, memos or forms and that require review and analysis of a range of information sources.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Communication – Writing

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Plan documents	1.1 Determine the purposes of documents 1.2 Choose appropriate formats for documents 1.3 Establish means of communication 1.4 Determine requirements of documents 1.5 Determine categories and logical sequences of data, information and knowledge to achieve document objectives

ELEMENT	PERFORMANCE CRITERIA
	1.6 Develop overview of structure and content of documents
2 Draft text	2.1 Review and organise available data, information and knowledge according to proposed structure and content 2.2 Ensure data, information and knowledge is aggregated, interpreted and summarised to prepare text that satisfies document purposes and objectives 2.3 Include graphics as appropriate 2.4 Identify gaps in required data and information, and collect additional material from relevant enterprise personnel 2.5 Draft text according to document requirements and genre 2.6 Use language appropriate to the audience
3 Prepare final text	3.1 Review draft text to ensure document objectives are achieved and requirements are met 3.2 Check grammar, spelling and style for accuracy and punctuation 3.3 Ensure draft text is approved by relevant enterprise personnel 3.4 Incorporate revisions in final copy
4 Produce document	4.1 Choose basic design elements for documents appropriate to audience and purpose 4.2 Use word processing software to apply basic design elements to text 4.3 Check documents to ensure all requirements are met

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 2.2, 2.4, 3.1, 3.2, 4.3	- Interprets information to identify requirements and prepares material suitable to target audience and environment - Proofreads texts for accuracy
Writing	1.6, 2.2, 2.3, 2.5,	Creates documents for a specific audience using cohesive and well-structured language to convey

	2.6, 3.2, 3.4, 4.1	detailed and accurate information Ensures vocabulary, layout and grammatical arrangement achieves meaning and intent of document
Oral Communication	1.1, 1.4, 2.4, 3.3	Obtains information or clarifies requirements by asking questions and listening
Navigate the world of work	1.4, 4.3	Adheres to organisational policies and procedures related to document production
Interact with others	1.1, 1.4, 1.5, 2.4, 3.3	Follows accepted communication practices and protocols when seeking advice about documents from colleagues, supervisors and managers
Get the work done	1.1-1.6, 2.1-2.5, 3.3, 4.1-4.2	- Plans, organises and implements tasks required to produce documents - Makes decisions based on standard procedures, using more formal decision making processes where required - Uses the main features and functions of digital tools to complete work tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBWRT401 Write complex documents	BSBWRT401A Write complex documents	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

Assessment Requirements for BSBWRT401 Write complex documents

Modification History

Release	Comments
Release 1	This version first released with BSB Business Services Training Package Version 1.0.

Performance Evidence

Evidence of the ability to:

- plan, draft and finalise complex documents that require review and analysis of a range of information sources
- use business technology to apply formatting, and incorporate graphics
- edit the draft text to ensure accuracy and clarity of information, obtain feedback on the draft and revise the draft
- apply the enterprise style guide/house style.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- identify the enterprise style guide/house style
- outline formatting styles and their impact on formatting, readability and appearance of documents
- explain rules and conventions for written English, as defined by general and specialist sources.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the communication – writing field of work and include access to:

- office equipment and resources
- organisational policies and procedures
- organisational style guides.

Assessors must satisfy NVR/AQTF assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=11ef6853-ceed-4ba7-9d87-4da407e23c10>

FBPBEV2001 Operate a deaeration, mixing and carbonation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down equipment used to deaerate, mix and carbonate aerated drink products prior to filling.

The unit applies to individuals who are production workers responsible for applying basic operating procedures to operate and monitor, a deaerator, a continuous flow mixing process and a carbonator.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Beverages (BEV)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the equipment	1.1 Ensure materials are available according to operating requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
and process for operation	1.2 Identify and ensure cleaning and maintenance requirements have been met according to food safety requirements 1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment to ensure optimum performance 1.6 Carry out pre-start checks according to operator instructions
2. Start and monitor the deaeration, mixing and carbonation process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Ensure that product specifications are being met at each stage according to production specifications 2.5 Rectify or report out-of-specification product or process outcomes according to workplace procedures
3. Shut down the deaeration, mixing and carbonation process and report maintenance requirements	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Maintain the work area and report identified maintenance requirements according to workplace procedures 3.4 Update and maintain records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret textual information to identify relevant and key information from specifications, instructions, production schedules and operating and service manuals

Skill	Description
Writing	Use clear language and correct concepts and industry terminology for reporting and keeping records
Numeracy	Recognise and perform basic calculations for handling product and material weights and volumes and for setting processing parameters
Oral communication	Use clear language and correct concepts and industry terminology to ensure clarity of meaning when reporting issues
Navigate the world of work	Recognise and implement organisational expectations and follow explicit protocols and procedures
Get the work done	- Follow clearly defined instructions and sequencing, and monitor own progress for the task, seeks assistance when necessary - Respond to routine problems following instruction and procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPBEV2001 Operate a deaeration, mixing and carbonation process.	FDFBV2001A Operate a deaeration, mixing and carbonation process.	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPBEV2001 Operate a deaeration, mixing and carbonation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for deaeration, mixing and carbonation
- started, operated, monitored and adjusted process equipment according to work health and safety policies and procedures to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- shut down equipment safely
- applied food safety policies and procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each stage of the deaeration, mixing and carbonation process, including the relationships between pressure, temperature and volume on processing outcomes
- basic operating principles of deaeration, mixing and carbonation equipment including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of process equipment sensors and related feedback instrumentation
 - equipment service requirements and actions to take if services are not available
- process flow of the deaeration, mixing and carbonation and the effect of outputs on downstream processes, including:
 - how each stage of the process affects related stages

- how the outputs of this process affect the filling stage
- quality characteristics to be achieved by each stage of the process, including:
 - amount of dissolved air to be removed at deaeration
 - typical water and syrup ratios for product types
 - volume of carbon dioxide to be dissolved in the aerated product
- quality and condition requirements of inputs and effect of variation on process performance including:
 - characteristics of different ingredients
 - how ingredients behave when processed
- operating requirements of deaeration, mixing and carbonation equipment and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing as required by the process including:
 - inspection or test points (control points) in the process
 - procedures and recording requirements
 - test procedures for brix and carbonation
 - other tests
- contamination and food safety risks associated with the process and related procedures
- common causes of variation in output quality and corrective action required
- work health and safety hazards and controls for deaeration, mixing and carbonation equipment
- requirements of different shutdown procedures for the process including:
 - workplace production requirements
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste and rework collection and handling procedures related to the deaeration, mixing and carbonation equipment and process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for deaeration, mixing and carbonation equipment
- cleaning and sanitation procedures for deaeration, mixing and carbonation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions

- resources, equipment and materials:
 - personal protective clothing used for food handling and safe operation of equipment
 - suitable water supply
 - procedures and equipment for cleaning deaeration, mixing and carbonation equipment and work area
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - specifications, control points and parameters for the deaeration, mixing and carbonation equipment and process
 - deaeration, mixing and carbonation equipment operating and service manuals
 - record-keeping documents required for the work specified in the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPBEV2002 Manufacture roast and ground coffee

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a blending, roasting and grinding process.

The unit applies to production workers responsible for the operation and monitoring of a blending, roasting and grinding process and associated equipment in a coffee production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Beverages (BEV)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the blending, roasting and grinding process for operation	1.1 Ensure materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have been met according to food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment to ensure optimum performance 1.6 Carry out pre-start checks according to operator instructions
2. Operate and monitor the blending, roasting and grinding process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Blend and roast green beans according to product and recipe specifications 2.5 Grind roasted beans to product specifications 2.6 Identify and rectify or report out-of-specification production outcomes
3. Shut down the roasting and grinding process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Maintain the work area and complete appropriate report identifiable maintenance requirements according to workplace procedures 3.4 Update and maintain records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret textual information to identify relevant and key information from specifications, instructions and operating manuals

Skill	Description
Writing	Use clear language and correct concepts and industry terminology for reporting and keeping records
Numeracy	Recognise and perform basic calculations for handling product and material weights and volumes and for setting processing parameters
Oral communication	Use clear language and correct concepts and terminology to ensure clarity of meaning when reporting issues
Get the work done	- Follow clearly defined instructions and sequencing, and monitor own progress for the task, seek assistance when necessary - Respond to routine problems following instruction and procedures
Navigate the world of work	Recognise organisational expectations and follow explicit protocols and procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPBEV2002 Manufacture roast and ground coffee	FDFBV2002A Manufacture coffee (roast and ground)	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPBEV2002 Manufacture roast and ground coffee

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for blending, roasting and grinding
- started, operated, monitored and adjusted process equipment to achieve required quality outcomes according to work health and safety policies and procedures
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records
- shut down equipment safely
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- steps and purpose of each stage in the roasting and grinding process
- basic operating principles of roast and ground coffee equipment including:
 - main equipment components
 - status and purpose of guards
 - basic principles and operation of roasting and grinding system
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- roasting and grinding flow process and the effect of outputs on the downstream processes including:
 - how each stage of the process affects related stages
 - how the outputs of this process affect the filling stage
- quality characteristics to be achieved by the roasting and grinding process including:

- varieties of green beans
- effect of bean characteristics on roasting and grinding processes
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- inspection or test points (control points) in the roast and ground coffee process and the related procedures and recording requirements
- contamination and food safety risks associated with the roast and ground coffee process and related control measures
- common causes of product variation and corrective action required
- workplace health and safety hazards and procedures, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdown procedures for the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
 - isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures related to the process
- basic operating principles of process control equipment including:
 - the physical equipment
 - the relationship between control panels and systems
 - routine maintenance procedures for roasting and grinding equipment
- cleaning and sanitation procedures for roast and coffee grinding equipment and worksite.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing used for food handling and safe operation of coffee roasting and grinding equipment
 - coffee roasting and grinding equipment and manuals
 - green coffee
 - suitable water supply
 - sampling schedules, test procedures and related equipment
 - record-keeping documents required for the work specified in the performance evidence
 - procedures and equipment for cleaning roast and coffee grinding equipment and work area

- specifications:
 - work procedures, including safe work practices, food safety, quality, and environmental requirements
 - specifications, control points and parameters for roasting coffee.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPBEV2003 Operate an ice manufacturing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, monitor, and adjust a process to manufacture ice.

The unit applies to production workers responsible for the operation and monitoring of an ice manufacturing process and equipment where the process is not highly or fully automated.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Beverages (BEV)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the ice making equipment and process for operation	1.1 Ensure water suitable for ice manufacture is available according to production requirements 1.2 Identify and confirm cleaning and maintenance requirements have been met according to food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment performance 1.6 Carry out pre-start checks according to operators instructions
2. Operate and monitor the ice making process	2.1 Start and operate the process following work health and safety procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Monitor the process to ensure that specifications are met according to production specifications 2.5 Identify, rectify or report out-of-specification product/process outcomes according to workplace procedures
3. Shut down the ice making process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Maintain the work area and report identified maintenance requirements according to workplace procedures 3.4 Update and maintain records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets textual information to identify relevant and key information from specifications, instructions and operating manuals
Writing	Uses clear language and correct concepts and industry terminology for reporting and keeping records

Skill	Description
Numeracy	Recognises and performs basic calculations for handling product and material weights and volumes and for setting processing parameters
Oral communication	Uses clear language and correct concepts and terminology to ensure clarity of meaning when reporting issues
Navigate the world of work	Recognises organisational expectations and follows explicit protocols and procedures
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for the task, seeks assistance when necessary - Responds to routine problems following instruction and procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPBEV2003 Operate an ice manufacturing process	FDFBV2003A Operate an ice manufacturing process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPBEV2003 Operate an ice manufacturing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for ice manufacture
- started, operated, monitored and adjusted process equipment to achieve required quality outcomes
- recognised and corrected typical faults and inconsistencies
- completed workplace records
- shut down equipment
- applied food safety procedures to work practice
- followed workplace health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic operating principles of ice manufacturing equipment, including:
 - types of ice production
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- equipment service requirements and actions to take if services are not available
- stages in the ice making cycle including a make and defrost stage
- water treatment required prior to use in ice making
- operating requirements, parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:

- signs and symptoms of faulty equipment
- early warning signs of potential problems
- adjustments required to take account of ambient temperature
- contamination and food safety risks and related procedures
- common causes of variation to ice production and corrective action required
- workplace health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- storage requirements for packed ice
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including:
 - waste and rework collection
 - handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- basic routine maintenance procedures for ice making equipment
- cleaning and sanitation procedures for ice making equipment and worksite.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing used for food handling and safe operation of equipment
 - ice making equipment
 - suitable water supply for making ice
 - procedures and equipment for cleaning equipment and work area
- specifications:
 - work procedures, including safe work practices, food safety, quality, and environmental requirements
 - specifications, control points and parameters for making ice
 - equipment operating and service manuals
 - record-keeping documents required for the work specified in the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCHE3001 Conduct cheese making operations

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to carry out cheese making in a bulk packaging operations using an integrated industrial process under the direction of the cheese manufacturing manager.

This unit applies to individuals working as advanced operators in industrial cheese enterprises who take responsibility for their own work. It does not include milk preparation processes or cheese curing, portioning or retail packaging processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Cheese (CHE)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to work	1.1 Organise the work tasks to be completed 1.2 Identify workplace health and safety hazards, assess risks and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	implement control measures 1.3 Identify food safety and quality non-compliance issues and report to supervisor 1.4 Select and use appropriate personal protective equipment
2. Monitor milk supply and quality	2.1 Ensure the availability of milk supply for batch according to product specifications 2.2 Check the sample data on milk for composition, homogeneity, somatic cell count and disk assay according to specification 2.3 Maintain milk at temperature required for inoculation with the culture according to recipe and specifications
3. Prepare cheese making equipment and add ingredients	3.1 Ensure ingredients are available to meet product requirements 3.2 Measure ingredients to meet recipe requirements 3.3 Handle ingredients safely and according to procedures to maintain purity and viability 3.4 Ensure equipment is ready for use according to operating procedures and safety requirements 3.5 Set and operate cheese making equipment to meet specified requirements 3.6 Load ingredients into the plant at the required stage 3.7 Check the final mix against specifications
4. Carry out process control and make adjustments according to operating procedures	4.1 Implement equipment start-up and shutdown according to safety requirements and operating procedures 4.2 Identify and report equipment faults 4.3 Monitor cheese making processes taking required samples according to workplace procedures 4.4 Carry out routine tests and record results according to workplace procedures 4.5 Check cheese for food safety and quality requirements 4.6 Identify, rectify and report out of specification cheese 4.7 Package cheese for curing and distribution with correct batch number attached 4.8 Clean equipment to meet production and hygiene requirements after each batch

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Record and review cheese making process	5.1 Monitor cheese yields and compare to standards 5.2 Review environmental practices and safety standards used in the process 5.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Reads and interprets recipes, operating procedures, specifications, and other documentation from a variety of sources and consolidates information to determine production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling and terminology when reporting and maintaining production records
Numeracy	- Interprets and manipulates numerical information for weights and measures relating to cheese recipes - Performs mathematical calculations for sample tests and interprets results to determine action
Oral communication	Clearly explains detailed information using language, tone and pace appropriate to audience when reporting to supervisor
Navigate the world of work	- Takes full responsibility for following policies, procedures and standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Uses a range of strategies to establish a sense of connection and build rapport with co-workers
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision making processes for more complex and non-routine situations

Skill	Description
	Contributes to continuous improvement of current work practices related to environmental practices and safety standards.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCHE3001 Conduct cheese making operations	FDFCH3001A Coordinate cheese making operations	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCHE3001 Conduct cheese making operations

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has completed all parts of the cheese making process to produce at least one cheese product, including:

- checking, mixing and adding ingredients for cheese making according to recipe and production requirements
- operating, monitoring and adjusting cheese making equipment to meet production requirements and in accordance with safety procedures
- sampling and testing cheese during development and adjusting equipment, ingredients or timing according to procedures and recipe
- preparing and packaging cheese for curing and distribution
- applying food safety policies and procedures to work practices
- reviewing the cheese making process and maintaining records according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose, basic principles and processes of cheese making including:
 - the main components of milk and cheese (both curds and whey)
 - milk characteristics and components important in cheese making
 - milk preparation for cheese making (fat and protein standardisation, and pasteurisation)
 - types of starters used and their role in the fermentation process
 - effect of milk characteristics on cheese processing performance
 - use of coagulating enzymes to initiate the syneresis process
 - use of adjunct cultures

- moisture control in cheese making
- organoleptic properties of cheese and their relationship to processes and ingredients in cheese making
- effects of pH and temperature on cheese processing performance and product quality
- types and impact of inhibitory substances in milk
- cheese making equipment and operations including:
 - equipment start-up, shutdown and emergency procedures
 - quality characteristics to be achieved by a cheese making process
 - operation and routine maintenance requirements of cheese making and packing plant and equipment
 - operational procedures for operating the cheese making process, including adding ingredients, testing, measuring and recording, and making limited adjustments to ingredient recipes or the operation of equipment according to procedures
 - work health and safety hazards and controls
- common causes of variation and corrective action required for each stage of the cheese making operation including:
 - microbial contaminants of cheese (lipolytic bacteria, yeasts, moulds, bacillus, listeria, E. coli, salmonella, coliforms and staphylococci) and their impact on cheese quality
 - impact of bacteriophage on the fermentation process
 - sampling and testing procedures for contaminant microbes
 - contamination risk of inoculants and contaminants
 - food safety risks associated with the process and related control measures
 - sampling and testing procedures for cheese quality
- packaging procedures
- product/batch changeover procedures
- line responsibility for reporting production and performance information
- cleaning and hygiene management of cheese making including:
 - food safety and quality assurance standards and procedures
 - hygiene, cleaning and sanitation procedures in line with best manufacturing practice
 - Food Standards Code
 - routine maintenance procedures
- environmental issues and controls relevant to the process, including waste collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately reflects performance in a real workplace setting
- resources, equipment and materials:
 - cheese making production process and related equipment

- equipment operating procedures including control points and process settings
- sampling and testing equipment and procedures
- recording systems to meet food safety and quality assurance requirements
- cheese making consumables
- personal protection equipment and material safety data sheets (MSDS)
- cleaning procedures, materials and equipment
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - product specifications and recipes.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCHE3002 Carry out processes for a range of artisan cheeses

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to carry out artisan cheese making processes.

This unit applies to individuals who work in small scale cheese production enterprises and use discretion and judgement in their work.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Cheese (CHE)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to work	1.1 Organise the work tasks to be completed 1.2 Identify workplace health and safety hazards, assess risks and implement control measures 1.3 Identify and address food safety and quality non-compliance issues

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to legislative requirements 1.4 Select and use appropriate personal protective equipment
2. Apply sanitation procedures	2.1 Ensure the storage area for starter cultures is maintained according to workplace hygiene practices 2.2 Keep all surfaces and equipment clean and sanitised according to workplace sanitation procedures 2.3 Ensure raw milk is kept separate from pasteurised milk operations 2.4 Record food safety related information according to workplace food safety standards
3. Implement procedures to prepare milk for cheese making	3.1 Carry out clarification procedures for raw milk, if required 3.2 Implement standardisation procedures for milk to be processed into cheese 3.3 Carry out pasteurisation procedures for milk, if required
4. Carry out procedures to inoculate milk and cut the curd	4.1 Add inoculants and adjuncts to milk and allow it to ripen to specification 4.2 Measure rennet accurately and dilute before adding to milk 4.3 Maintain temperature at specified level according to the production requirements 4.4 Test curd for readiness to cut according production testing procedures
5. Implement procedures to separate, cook and wash the curd	5.1 Carry out curd cutting according to production procedures 5.2 Test whey for pH or acidity, temperature and fat levels to ensure curd cutting efficiency 5.3 Ensure optimal syneresis according to cooking schedule and curd stirring requirements 5.4 Carry out draining and washing procedures to ensure curd is at required moisture, pH level and consistency
6. Carry out fermentation, salting and optional pressing treatments	6.1 Transfer curd to hoops to form the correct shape for the type of cheese 6.2 Maintain temperature profile required for the cheese type to complete fermentation 6.3 Add salt after draining according to cheese type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	6.4 Apply salting treatments according to cheese type 6.5 Press dry salted cheese in hoops according to cheese type
7. Implement cheese curing and packaging procedures	7.1 Apply maturing requirements according to cheese type 7.2 Monitor the maturing environment according to the cheese type 7.3 Apply ripening agents to cheese according to requirements of cheese type 7.4 Carry out packaging and labelling procedures either before or after maturing according to cheese type and workplace requirements
8. Assess the organoleptic properties of cheese and relate to specifications	8.1 Check that flavour meets specifications for the cheese type 8.2 Examine the texture of cheese and compare to specifications 8.3 Examine cheese for evenness of colour and finish according to specifications 8.4 Identify possible causes of out of specification results and make changes to procedures to address quality issues for future cheese production
9. Meet workplace requirements for food safety, quality and environmental management	9.1 Keep records of cheese manufacture according to workplace procedures 9.2 Dispose of waste according to workplace environmental and waste management procedures 9.3 Review the environmental impacts of the cheese making operation and identify opportunities for improvement

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets cheese making procedures and specifications from a variety of sources
Writing	Completes organisational documentation in required format

Skill	Description
Numeracy	• Interprets and manipulates numerical information for volumes, weights and measures of ingredients • Performs mathematical calculations for sample tests and interprets results
Navigate the world of work	• Follows workplace procedures and legislative requirements • Identifies and implements changes needed to procedures
Get the work done	• Plans and completes tasks in correct sequence for effective cheese making outcomes • Makes decisions directly related to completion of cheese making tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCHE3002 Carry out processes for a range of artisan cheeses	FDFCH3002A Carry out processes for a range of artisan cheeses	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCHE3002 Carry out processes for a range of artisan cheeses

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has prepared at least two separate batches of different artisan cheese types and demonstrated the following points for each batch:

- followed required food safety, hygiene, health and safety, quality and environmental management procedures
- prepared milk for cheese making
- inoculated and ripened milk to produce coagulate according to cheese type
- prepared the curd by, cooking, cutting, draining, salting and pressing according to type of cheese
- treated the cheese for maturing according to cheese type
- packaged and labelled artisan cheeses according to product requirements
- maintained records according to workplace and legislative requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of the purpose and basic principles of cheese making, including:

- main cheese types and their characteristics, and the common processes for making the different cheese types
- main components of milk and cheese (both curds and whey)
- milk characteristics and components important in cheese making
- milk preparation for cheese making including when standardisation and pasteurisation are required
- effect of milk quality on cheese processing performance
- types and impact of inhibitory substances in milk

- types of starters used and their role in the fermentation process
- moisture control in cheese making
- processes of coagulation and syneresis and their role in cheese making
- effects of acidity (either pH or titratable acidity) and temperature on cheese processing performance and product quality
- role of yeasts, moulds and adjunct cultures in cheese making
- temperature and humidity requirements for maturing
- ripening agents for different cheese types
- contamination/food safety risks associated with the process and related control measures including:
 - microbial contaminants of cheese (lipolytic bacteria, yeasts, moulds, bacillus, listeria, E. coli, salmonella, coliforms and staphylococci) and their impact on cheese quality
 - the impact of bacteriophage in fermentation and ripening
 - contamination risk of inoculants and other contaminants
- techniques used to monitor and sample during the cheese making process for quality control, including:
 - inspecting
 - measuring
 - testing
- common causes of variation and corrective action required for each cheese making process
- organoleptic properties and their relationship to processes and ingredients in cheese making
- work health and safety hazards and controls
- procedures for:
 - routine maintenance
 - product/batch changeover
 - hygiene, cleaning and sanitation in line with best manufacturing practice
 - food safety and quality assurance in line with the Food Standards Code
 - environmental issues and controls, including waste collection and handling procedures
- procedures and responsibility for recording, reporting production and performance information and records required, including:
 - measurements for timing of operations
 - temperature
 - milk and curd acidity
 - curd weight
 - hooped yield
 - maturing data.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately reflects performance in a real workplace setting
- resources, equipment and materials:
 - production process and related equipment for making artisan cheeses
 - sampling and testing equipment and procedures
- specifications:
 - manufacturers' advice and operating procedures for cheese making equipment
 - methods for collecting data and calculating yields, efficiencies and material variances appropriate to the type of cheese and the production environment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2001 Examine raw ingredients used in confectionery

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to recognise the key characteristics of raw materials used in confectionery products to support production specifications.

This unit applies to individuals who work as production workers responsible for the operation and monitoring of confectionery equipment and processes under general supervision and exercise limited autonomy.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionary (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Recognise raw ingredients used in confectionery production	1.1 Identify key confectionery groups and their features 1.2 Recognise commonly used raw ingredients and their origins 1.3 Identify types of carbohydrates used in confectionery 1.4 Identify types of sweeteners used in confectionery

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Discriminate between grades and properties of sugar 1.6 Identify types of starches and glucose syrups 1.7 Identify types of fats used in confectionery
2. Examine the effects of raw materials in confectionery production	2.1 Compare effects of using different types of commonly used raw ingredients in confectionery 2.2 Compare effects of using different types of carbohydrates and fats in confectionery 2.3 Compare effects of using different types of sugars in confectionery 2.4 Examine effects of using types of starches and glucose syrups in confectionery 2.5 Examine effects of temperature and water on raw ingredients 2.6 Examine effects of production processes on raw ingredients
3. Recognise processing requirements for raw materials	3.1 Interpret specifications for production 3.2 Predict implications for processing of raw materials 3.3 Identify common problems associated with raw materials 3.4 Determine actions required to address common problems 3.5 Identify storage and handling requirements for raw ingredients 3.6 Identify processing requirements in accordance with work procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret information from a variety of sources relevant to confectionary production
Get the work done	Respond to highly obvious routine problems using step by step instruction and procedures or a trial and error process for comparing and examining different confectionary raw materials

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2001 Examine raw ingredients used in confectionery.	FDFCON2001A Examine raw ingredients used in confectionery.	Updated to meet Standards for Training Packages Changes to Elements and Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2001 Examine raw ingredients used in confectionery

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has performed each of the following on at least one occasion:

- identified the key confectionery groups and the main raw materials used
- compared the effects of different raw materials in confectionery
- recognised the effects of temperature and water on raw materials
- recognised the effects of the production process on raw materials
- identified common problems with raw materials in the production process and determined required action
- accessed and interpreted workplace information on raw materials.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- origins of raw materials used in confectionery, including:
 - characteristics of raw materials
 - effects and uses of raw materials
 - storage and handling requirements for raw materials
- confectionery product types
- common problems associated with raw and action required
- types of carbohydrates and uses in confectionery
- types of sweeteners and uses in confectionery
- types of starches and glucose syrups and uses in confectionery.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - ingredients used in the preparation of high/low boil product as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2002 Operate a boiled confectionery process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a high boil and low boil confectionery process.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of confectionery boiling equipment in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the high and low boil equipment and process for operation	1.1 Confirm materials are available according to workplace procedure 1.2 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Select and combine ingredients for syrup in the sequence specified by batch or recipe instructions 1.4 Identify and confirm cleaning and maintenance requirements and status of high and low boil process equipment 1.5 Enter processing and operating parameters according to equipment operating instructions 1.6 Check and adjust equipment performance according to operating parameters 1.7 Carry out pre-start checks according to operating procedures
2. Operate and monitor the high and low boil process	2.1 Deliver ingredients and additives in the required quantities and sequence to meet recipe specifications 2.2 Start and operate the process safely according to operating instructions and safety procedures 2.3 Monitor equipment to identify variation in operating conditions 2.4 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.5 Heat, cook and cool product according to specification 2.6 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.7 Maintain the work area according to workplace procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the high and low boil process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets and comprehends information contained in recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on confectionary production issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress seeking assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2002 Operate a boiled confectionery process	FDFCON2002A Operate a boiled confectionery process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2002 Operate a boiled confectionery process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one high and low boiled confectionery process, including:

- checking the availability of materials
- selecting, fitting and using personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety and equipment operating procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the high/low boil process relating to the range of products to be produced, including:
 - ingredients used and their purpose
 - syrup making (super saturated solutions)
 - relationship between temperature and moisture content
 - the effect of vacuum on processing
 - reactions including crystallisation

- process stages
- maturation and further processing requirements
- basic operating principles of equipment, including main equipment components, status and purpose of guards, the effect of vacuum on the cooking process and further processing, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the high/low boil process and the effect of outputs on downstream processes
- quality requirements of materials used in low and high boil manufacture and effect of variation on process performance and outputs
- quality characteristics required of process outputs
- methods used to further process high and low boils, including basic forming or extruding and stamping, cooling, pulling and aerating as required by product range
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the high/low boil process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the high and low boil process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the high and low boil process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- product and process changeover procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the high and low boil process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures, where relevant.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment

- process and related equipment and services, including mixing equipment, cookers and coolers
- ingredients used in the preparation of high/low boil product
- sampling schedules and test procedures and equipment
- cleaning materials, equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2003 Operate a chocolate conching process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a chocolate conching process.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of chocolate conching process equipment in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the conching equipment and process for operation	1.1 Confirm refined mass is available according to workplace procedures 1.2 Identify and confirm cleaning and maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to workplace requirements 1.3 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit 1.4 Fit and adjust machine components and related attachments 1.5 Enter processing or operating parameters according to equipment operating instructions 1.6 Check and adjust equipment performance according to operating parameters 1.7 Carry out pre-start checks according to operating procedures
2. Operate and monitor the conching process	2.1 Start and operate the conching process safely according to operating instructions and safety procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.4 Confirm that specifications are met at each stage according to recipe 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the conching process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	Interprets and comprehends information contained in recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on confectionary production issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for confectionary production and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2003 Operate a chocolate conching process	FDFCON2003A Operate a chocolate conching process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2003 Operate a chocolate conching process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one chocolate conching process, including:

- checking the availability of materials
- selecting, fitting and using relevant personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety and equipment operating procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of conching chocolate, including:
 - processing stages in chocolate making and the role of conching
 - ingredients used in chocolate and those added during conching, including ingredients in different types of chocolate as appropriate to production requirements and an understanding of the quality requirements and role of each main ingredient
 - changes that occur in ingredients during conching
 - significance of viscosity and methods of adjustment

- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the conching process and the effect of outputs on downstream processes
- quality requirements of mass and ingredients used, and effect of variation on process performance and outputs
- quality characteristics required of the conching stage
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the conching process, including an understanding of viscosity testing procedures and other inspections and tests as required
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the conching process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- product and process changeover procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the conching process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for chocolate conching equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - ingredients used in the preparation of chocolate products
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters
- recipe/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2004 Operate a chocolate depositing or moulding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a depositing process that deposits chocolate into moulds or directly onto conveyors.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of chocolate depositing or moulding equipment in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the depositing equipment and process	1.1 Confirm materials are available according to workplace procedure

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
for operation	1.2 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit 1.3 Condition equipment and ingredients according to recipe 1.4 Identify and confirm cleaning and maintenance requirements 1.5 Fit and adjust machine components and related attachments according to equipment operating instructions 1.6 Enter processing or operating parameters according to recipe and equipment operating instructions 1.7 Carry out pre-start checks according to operating procedures
2. Operate and monitor the depositing/moulding process	2.1 Start and operate the process safely according to operating instructions and safety procedures 2.2 Deposit chocolate to achieve required coverage 2.3 Monitor equipment to identify variation in operating conditions 2.4 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.5 Confirm that specifications are met at each stage with recipe 2.6 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.7 Maintain the work area according to workplace procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the depositing/moulding process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	Interprets and comprehends information contained in chocolate depositing or moulding equipment operational instructions and workplace procedures
Writing	Enters operational data into production equipment accurately
Numeracy	Locates and applies basic calculations for numerical information found in recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on chocolate depositing or moulding production issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for chocolate depositing or moulding production and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2004 Operate a chocolate depositing or moulding process	FDFCON2004A Operate a chocolate depositing or moulding process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2004 Operate a chocolate depositing or moulding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one chocolate depositing or moulding process, including:

- checking the availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the chocolate depositing process, including ingredients used, handling and conditioning requirements and process stages
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the chocolate depositing process and the effect of outputs on downstream processes

- quality characteristics and types of chocolate used for depositing
- quality requirements of centres as appropriate to product and the effect of variation on process outputs
- quality characteristics to be achieved by the deposited product
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the chocolate depositing process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the chocolate depositing process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the chocolate depositing process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the chocolate depositing process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for chocolate depositing or moulding equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - ingredients used in the preparation of chocolate depositing or moulding product as required
 - sampling schedules and test procedures and equipment
 - cleaning materials, equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters

- recipe/batch instructions for chocolate depositing or moulding
- specifications, control points and processing parameters
- documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2005 Operate a confectionery depositing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a depositing process to deposit into solid or flexible moulds. This is sometimes known as starchless moulding.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of confectionery depositing equipment in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the depositing equipment and process for operation	1.1 Confirm materials are available according to workplace procedure 1.2 Identify and confirm cleaning and maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit 1.4 Fit and adjust machine components and related attachments according to equipment operating instructions 1.5 Enter processing or operating parameters according to equipment operating instructions and confectionary specifications 1.6 Check and adjust equipment performance according to operating parameters 1.7 Carry out pre-start checks according to operating procedures 1.8 Transfer syrup to depositing equipment according to operating procedures
2. Operate and monitor the depositing process	2.1 Start and operate the depositing process safely according to operating instructions and safety procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.4 Confirm that specifications are met at each stage according to recipe 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the depositing process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets and comprehends information contained in recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into confectionery depositing production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on confectionery depositing issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for confectionery depositing and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2005 Operate a confectionery depositing process	FDFCON2005A Operate a confectionery depositing process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2005 Operate a confectionery depositing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one confectionery depositing process, including:

- checking the availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment safely.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety and equipment operating procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the depositing process, including product preparation and conditioning requirements and product depositing
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the depositing process and the effect of outputs on downstream processes

- quality requirements of materials for depositing and effect of variation on depositing process performance and outputs
- quality characteristics required of process outputs
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the depositing process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the depositing process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the depositing process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the depositing process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for confectionery depositing equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - ingredients used in the preparation of high/low boil product as required
 - sampling schedules and test procedures and equipment
 - cleaning materials, equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch instructions for confectionery depositing
 - specifications, control points and processing parameters

- confectionery depositing process and related equipment and services
- documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2006 Operate a granulation and compression process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a granulation and compression process.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of granulation and compression equipment in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the granulation equipment and process for operation	1.1 Confirm materials are available according to workplace procedure 1.2 Identify and confirm cleaning and maintenance requirements 1.3 Identify safety requirements and wear appropriate personal

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	protective equipment ensuring correct fit 1.4 Set the granulation process to production specifications according to equipment operating instructions 1.5 Check and adjust equipment performance according to operating parameters 1.6 Carry out pre-start checks according to operating procedures
2. Prepare the compression process for operation	2.1 Confirm granulation materials are available according to workplace procedure 2.2 Set the compression process to production specifications 2.3 Check and adjust equipment performance according to operating parameters 2.4 Carry out pre-start checks according to operating procedures
3. Operate and monitor the granulation and compression process	3.1 Start and operate the process safely according to operating instructions and safety procedures 3.2 Combine ingredients in specified sequence according to recipe and procedures 3.3 Confirm granules of the required particle size are produced according to product specifications 3.4 Ensure the compression process produces compressed product to specification 3.5 Monitor equipment to identify variation in operating conditions 3.6 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 3.7 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 3.8 Maintain the work area according to workplace procedures 3.9 Maintain workplace records according to workplace procedures
4. Shut down the compression process	4.1 Identify the appropriate shutdown procedure according to operating instructions 4.2 Shut down the process safely according to shutdown procedures 4.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets and comprehends information contained in granulation and compression recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into granulation and compression production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in granulation and compression recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on granulation and compression production issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for granulation and compression production and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2006 Operate a granulation and compression process	FDFCON2006A Operate a granulation and compression process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2006 Operate a granulation and compression process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one granulation and compression process, including:

- checking the availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety and equipment operating procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the granulation and compression process
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the granulation and compression process and the effect of outputs on downstream processes

- quality requirements of ingredients for granulating and effect of variation on the granulation process
- quality requirements of granulated mass and effect of variation on compression process
- operating requirements of both granulation and compression, related parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the granulation and compression process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the granulation and compression process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the granulation and compression process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the granulation and compression process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for the granulation and compression process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - ingredients used in the preparation of granulation and compression confectionary products as required
 - sampling schedules and test procedures and equipment
 - cleaning materials, equipment and procedures
- specifications:
 - granulation and compression work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on granulation and compression equipment capacity and operating parameters

- recipe/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2007 Operate a panning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a panning process to coat tablets and/or centres.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of panning equipment in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the panning equipment and process for operation	1.1 Confirm materials are available according to workplace procedure 1.2 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Select and prepare centres and coating according to batch or recipe instructions 1.4 Identify and confirm cleaning and maintenance requirements 1.5 Prepare the panning process to meet safety and production requirements 1.6 Check and adjust equipment performance according to operating parameters 1.7 Carry out pre-start checks according to operating procedures
2. Operate and monitor the panning process	2.1 Start and operate the process safely according to operating instructions and safety procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.4 Confirm that specifications are met at each stage according to workplace procedures 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the panning process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets and comprehends information contained in recipes,

Skill	Description
	equipment operational instructions and workplace procedures
Writing	Enters operational data into panning production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in recipes and panning production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on panning process issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for panning process and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2007 Operate a panning process	FDFCON2007A Operate a panning process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2007 Operate a panning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one panning process, including:

- checking the availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting panning process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the panning process, including centre preparation and conditioning procedures and requirements, coating preparation and the stages in the panning process
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the panning process and the effect of outputs on downstream processes

- conditioning requirements for centres and coatings
- quality characteristics of centres and coatings for use in the panning process and the effect of variation on panning process performance and outputs
- quality characteristics to be achieved by the process
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the panning process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- food safety/contamination risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the panning process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the panning process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures relevant to the panning process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - ingredients used in the panning process
 - sampling schedules and test procedures and equipment
 - cleaning materials, equipment and procedures
- specifications:
 - granulation and compression work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on panning equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, control points and processing parameters

- documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2008 Operate a chocolate refining process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a chocolate mixing and refining process.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of mixing and refining equipment used in the manufacture of chocolate.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to mix ingredients	1.1 Confirm materials are available according to workplace procedure 1.2 Identify safety requirements and wear appropriate personal protective equipment ensuring correct fit

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Enter processing or operating parameters according to equipment operating instructions 1.4 Conduct pre-start checks according to operating parameters
2. Mix ingredients ready for refining process	2.1 Deliver ingredients and additives to the mixer in the required quantities and sequence to meet recipe specifications 2.2 Start and operate the mixing process safely according to operating instructions and safety procedures 2.3 Monitor equipment to identify variation in operating conditions 2.4 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.5 Confirm that specifications are met at each stage according to workplace procedures 2.6 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures
3. Prepare the refining equipment and process for operation	3.1 Confirm materials are available according to workplace procedures 3.2 Identify and confirm cleaning and maintenance requirements 3.3 Fit and adjust machine components and related attachments according to equipment operating instructions 3.4 Enter processing or operating parameters according to equipment operating instructions 3.5 Check and adjust equipment performance according to operating parameters 3.6 Carry out pre-start checks according to operating procedures
4. Operate and monitor the refining process	4.1 Start and operate the refining process safely according to operating instructions and safety procedures 4.2 Monitor equipment to identify variation in operating conditions 4.3 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 4.4 Confirm that specifications are met at each stage 4.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 4.6 Maintain the work area according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.7 Maintain workplace records according to workplace procedures
5. Shut down the refining process	5.1 Identify the appropriate shutdown procedure according to operating instructions 5.2 Shut down the process safely according to shutdown procedures 5.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets and comprehends information contained in chocolate refining recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into chocolate refining production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in recipes and production equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on chocolate refining issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for chocolate production and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2008 Operate a chocolate refining process	FDFCON2008A Operate a chocolate refining process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2008 Operate a chocolate refining process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one chocolate refining process, including:

- checking the availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of mixing and refining chocolate, including:
 - processing stages in chocolate making and the role of mixing, refining and pre-refining as appropriate
 - ingredients used in chocolate and those introduced during refining, including ingredients in different types of chocolate as appropriate to production requirements and an understanding of the quality requirements and role of each main ingredient
 - changes that occur in ingredients during mixing and refining
 - significance of particle size for product characteristics

- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the mixing and refining process and the effect of outputs on downstream processes
- quality requirements of ingredients used and effect of variation on process performance and outputs
- quality characteristics required of the refined mass
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the mixing and refining process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the mixing and refining process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the mixing and refining process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for chocolate refining equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - chocolate refining process and related equipment and services
 - ingredients used in the preparation of chocolate products
 - sampling schedules and test procedures and equipment
 - cleaning materials, equipment and procedures
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on chocolate refining equipment capacity and operating parameters
- recipe/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPCON2009 Operate a starch moulding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down sugar moulded products using a starch moulding process.

This unit applies to individuals who work under general supervision as production workers and are responsible for the operation and monitoring of starch moulding equipment and processes in a confectionery production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Confectionery (CON)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the starch moulding equipment and process for operation	1.1 Confirm materials are available according to workplace procedure 1.2 Condition starch for moulding according to production specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify and confirm cleaning and maintenance requirements 1.4 Identify safety requirements and wear appropriate personal protective equipment and ensure correct fit 1.5 Prepare starch mould to meet production requirements 1.6 Enter processing or operating parameters according to equipment operating instructions 1.7 Transfer ingredients or mix to moulding equipment 1.8 Check and adjust equipment performance according to operating parameters 1.9 Carry out pre-start checks according to operating procedures
2. Operate and monitor the starch moulding and removal process	2.1 Start and operate the process safely according to operating instructions and safety procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements according to workplace procedures 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the starch moulding process	3.1 Identify the appropriate shutdown procedure according to operating instructions 3.2 Shut down the process safely according to shutdown procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	Interprets and comprehends information contained in starch moulding recipes, equipment operational instructions and workplace procedures
Writing	Enters operational data into starch moulding production equipment accurately
Numeracy	Locates, recognises and applies basic calculations for numerical information found in starch moulding equipment
Navigate the world of work	- Follows clear instructions within defined level of responsibility - Recognises organisational expectations and follows explicit protocols and procedures, seeking clarification when required
Interact with others	Follows instructions and procedures regarding what and how to communicate when reporting on starch moulding production issues
Get the work done	- Follows clearly defined instructions and sequencing, and monitors own progress for starch moulding production and seeks assistance when necessary - Makes low-impact decisions around immediate clearly defined production tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPCON2009 Operate a starch moulding process	FDFCON2009A Operate a starch moulding process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPCON2009 Operate a starch moulding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit. There must be evidence that the individual has operated at least one starch moulding process, including:

- checking the availability of materials
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery
- starting, operating, monitoring and adjusting process equipment to achieve required quality outcomes
- taking corrective action in response to typical faults and inconsistencies
- completing workplace records
- shutting down equipment.

Throughout the process, individuals must:

- apply food safety procedures to work practices
- follow work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the starch moulding process, including an understanding of each stage:
 - starch mould preparation
 - product preparation and conditioning
 - product depositing
 - starch use and recovery cycle

- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the starch moulding and depositing process and the effect of outputs on downstream processes
- quality requirements of starch moulds and materials for depositing and effect of variation on starch moulding process performance and outputs, including the moisture absorption characteristics of starch and impact on the process
- quality characteristics required of process outputs
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the starch moulding process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the starch moulding process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the starch moulding process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the starch moulding process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for starch moulding equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - starch moulding process and related equipment and services
 - ingredients used in the preparation of starch moulding process
 - sampling schedules and test procedures and equipment

- cleaning materials, equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on starch moulding equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPDPR2001 Operate a butter churning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a butter churning process to produce sweet cream butter product to specification.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of butter churning equipment and processes in a dairy product production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy processing (DPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the butter churning equipment and process for operation	1.1 Confirm materials and personal protective equipment are available for operating requirements 1.2 Identify and confirm cleaning and maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to food safety requirements 1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements 1.4 Enter parameters required to meet safety and operating requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace procedures
2. Operate and monitor the butter churning process	2.1 Start up the butter churning process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines 2.7 Enter information in workplace records in required format
3. Shut down the butter churning process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the butter churning process
Writing	Complete records according to workplace guidelines using paper-based and/or electronic media

Skill	Description
Numeracy	• Monitor agitation speeds, flow rates, temperature and ingredient addition systems for the butter churning process against production specifications
Navigate the world of work	• Apply workplace procedures to own role and responsibilities • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental requirements • Maintain a clean and hazard-free work area • Maintain hygiene standards
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2001 Operate a butter churning process	FDFDP2001A Operate a butter churning process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPDPR2001 Operate a butter churning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.

There must be evidence that the individual has completed all steps required to set up, operate and monitor, and complete at least one butter churning process, including:

- conducted pre-start checks on machinery used for churning butter
- started, operated, monitored and adjusted butter churning process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified workplace health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices
- followed work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the butter churning process, including product preservation and the types of additives and ingredients used in the process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation

- the flow of the butter churning process and the effect of product output on downstream processes
- quality characteristics to be achieved by the butter churning process
- contamination and food safety risks associated with the process and related control measures
- the effect of raw material characteristics on the butter churning process
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- techniques used to monitor the butter churning process, including inspecting, measuring and testing, as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for butter churning equipment
- cleaning and sanitation procedures for butter churning equipment.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - butter churning process and related equipment and services
 - materials required for the butter churning process
 - cleaning materials equipment and procedures
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- stock flow systems, production schedules and batch or recipe instructions
- information on equipment capacity and operating parameters
- specifications, control points and processing parameters
- sampling schedules and test procedures and equipment
- routine preventative maintenance schedule
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors or realistic scenarios or roleplays.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPDPR2002 Operate a butter oil process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the knowledge and skills required to set up, operate, monitor and shut down the components of a butter oil process. This process, also known as an anhydrous milk fat (AMF) process, is used for the preparation of butter oil from either cream or melted butter.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of butter oil equipment and processes in a dairy product production environment. Operators must be capable of operating a butter oil process using either cream or melted butter.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy processing (DPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the butter oil	1.1 Confirm materials and personal protective equipment are available

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
equipment and process for operation	for operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status of high and low boil process equipment 1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements 1.4 Enter parameters required to meet safety and operating requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace requirements
2. Monitor the butter oil process operation	2.1 Start up the butter oil process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines, work health and safety, and food safety requirements 2.7 Enter information in workplace records in required format
3. Shut down the butter oil process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret and understand standard operating procedures for the butter oil process

Skill	Description
Writing	Complete records according to workplace guidelines in required format
Numeracy	Monitor data for pressure, water flow and temperature
Navigate the world of work	Understand main tasks, responsibilities and boundaries of own role, including use of personal protective equipment, hygiene and housekeeping standards and environmental care requirements
Interact with others	Report operational and safety information using required communication method
Get the work done	Follow workplace guidelines to address routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2002 Operate a butter oil process	FDFDP2002A Operate a butter oil process	Updated to meet Standards for Training Packages Prerequisites removed	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPDPR2002 Operate a butter oil process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated and monitored, and shut down at least one butter oil process using cream or melted butter, including:

- safely conducted pre-start checks on machinery used for the process
- safely started, operated, monitored and adjusted butter oil process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- safely shut down equipment
- applied food safety procedures to work practices
- followed work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each stage in the process, including an understanding of the stages, process flow and phases produced
- basic operating principles of equipment, including:
 - the principles of centrifuges and principles of evaporation
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a butter oil process and action to take if services are not available

- the effect of outputs on downstream processes
- quality characteristics (fat content) to be achieved by the process
- quality requirements of in-feed materials (cream or butter) and the effect of variation in material quality on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation and corrective action required, including how earlier stages in the process could contribute to cloudy product
- contamination and food safety risks, and related control measures
- work health and safety hazards and controls
- isolation, lock out and tag out procedures and responsibilities
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste or rework collection and handling procedures related to the process
- cleaning and sanitation procedures for the butter oil process.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - butter oil and related equipment and services
 - cream or butter to be processed
 - cleaning materials equipment and procedures
 - recording system or documents
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and documentation requirements
 - information on equipment capacity and operating parameters

- production schedule and batch instructions
- sampling schedules and test procedures and equipment
- documentation and recording requirements and procedures

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPDPR2003 Operate a curd production and cutting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the knowledge and skills required to set up, operate, adjust and shut down a curd production and cutting process in cheese making.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a curd production and cutting process, and associated equipment in a dairy production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy processing (DPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the curd production and cutting process for operation	1.1 Confirm materials and personal protective equipment are available 1.2 Identify and confirm cleaning and maintenance requirements according to food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements 1.4 Enter parameters required to meet safety and operating requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the curd production and cutting process	2.1 Start up the curd production and cutting process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines, work health and safety, and food safety requirements 2.7 Enter information in workplace records in required format
3. Shut down the curd production and cutting process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the curd production and cutting process
Writing	Complete records according to workplace guidelines using paper-based and/or electronic media

Skill	Description
Numeracy	Confirm process remains within specification for speed, flow rates time and temperature
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2003 Operate a curd production and cutting process	FDFDP2003A Operate a curd production and cutting process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPDPR2003 Operate a curd production and cutting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has set up, operated and monitored, and shut down a curd production and cutting process, including:

- conducted pre-start checks on machinery used for curd production and cutting
- started, operated, monitored and adjusted the curd production and cutting process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the curd production and cutting process, including the methods used to coagulate milk for cheese making
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- the flow of the curd production and cutting process, and the effect of product output on downstream processes

- stages and changes that occur during curd production, including physical and chemical changes that occur during curd production and cutting
- quality characteristics required for curd production and cutting
- factors that affect curd firmness
- contamination and food safety risks associated with the process and related control measures
- the effect of raw material characteristics on curd production and cutting
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- techniques used to monitor the curd production and cutting process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the curd production and cutting process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the curd production and cutting process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures
- cleaning and sanitation procedures for the curd production and cutting process.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - curd production and cutting process and related equipment and services
 - materials required for a curd production and cutting process
 - cleaning materials equipment and procedures

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - stock flow systems, production schedules and recipe instructions
 - information on equipment capacity and operating parameters
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - routine preventative maintenance schedule
- relationships:
 - interactions with team members and supervisors or realistic scenarios or roleplays.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPDPR2004 Operate a cooling and hardening process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the knowledge and skills required to set up, operate, adjust and shut down a process to cool and harden dairy products to specification.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of equipment and processes used to cool and harden dairy products in a dairy products production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy processing (DPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the cooling and hardening process for operation	1.1 Confirm materials and personal protective equipment are available for operating requirements 1.2 Identify and confirm cleaning and maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to food safety requirements 1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements 1.4 Enter parameters required to meet safety and operating requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the cooling and hardening process	2.1 Start up the cooling and hardening process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines, work health and safety and food safety requirements 2.7 Enter information in workplace records in required format
3. Shut down the cooling and hardening process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the cooling and hardening process

Skill	Description
Writing	Complete records according to workplace guidelines using paper-based and/or electronic media
Numeracy	- Confirm process remains within specification for time, temperature, flow rates and pressure - Interpret recording devices and gauges
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2004 Operate a cooling and hardening process	FDFDP2004A Operate a cooling and hardening process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPDPR2004 Operate a cooling and hardening process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has set up, operated and monitored, and shut down a cooling and hardening process, including:

- conducted pre-start checks on machinery used for cooling and hardening dairy products
- started, operated, monitored and adjusted the cooling and hardening process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the cooling and hardening process, including:
 - the principles of heat transfer
 - the difference between latent heat energy transfer and sensible heat energy transfer
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation

- the flow of the cooling and hardening process and the effect of product output on downstream processes
- stages and changes which occur during cooling and hardening
- quality characteristics to be achieved by cooling and hardening process
- effect of in-feed characteristics on cooling and hardening process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- techniques used to monitor the cooling and hardening process, such as inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process, and the related procedures and recording requirements
- common causes of variation and corrective action required
- contamination and food safety risks associated with the process and related control measures
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the cooling and hardening process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures
- cleaning and sanitation procedures for cooling and hardening equipment.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - cooling and hardening process and related equipment and services
 - cleaning materials equipment and procedures
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- stock flow systems, production schedules and batch or recipe instructions
- information on equipment capacity and operating parameters
- specifications, control points and processing parameters
- sampling schedules and test procedures and equipment
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors or realistic scenarios or roleplays.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPDPR2005 Operate a cheese pressing and moulding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the knowledge and skills required to set up, operate, adjust and shut down a pressing and moulding process to produce cheese to specifications.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of pressing and moulding equipment and processes in a cheese production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy processing (DPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the pressing and moulding equipment and process for operation	1.1 Confirm materials and personal protective equipment are available for operating requirements 1.2 Identify and confirm cleaning and maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to food safety requirements 1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements 1.4 Enter parameters required to meet safety and operating requirement 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace procedures
2. Operate and monitor the pressing and moulding process	2.1 Start up the pressing and moulding process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines, work health and safety and food safety requirements 2.7 Enter information in workplace records in required format
3. Shut down the pressing and moulding process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the cheese pressing and moulding process

Skill	Description
Writing	Complete records according to workplace guidelines using paper-based and/or electronic media
Numeracy	Confirm process remains within specification for equipment speeds, flow rates, time and temperature
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2005 Operate a cheese pressing and moulding process	FDFDP2005A Operate a cheese pressing and moulding process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPDPR2005 Operate a cheese pressing and moulding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has set up, operated and monitored, and shut down a cheese pressing and moulding process, including:

- conducted pre-start checks on machinery used for pressing and moulding cheese
- started, operated, monitored and adjusted the cheese pressing and moulding process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the pressing and moulding process
- basic operating principles of equipment, including:
 - main equipment components
 - equipment status and purpose of guards
 - operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- the flow of the pressing and moulding process, and the effect of product output on downstream processes
- quality characteristics to be achieved by the pressing and moulding process

- effect of raw material characteristics on pressing and moulding process performance
- contamination and food safety risks associated with the process and related control measures
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- techniques used to monitor the pressing and moulding process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for cheese pressing and moulding equipment
- cleaning and sanitation procedures for cheese pressing and moulding equipment.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - pressing and moulding process and related equipment and services
 - cleaning materials equipment and procedures
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - stock flow systems, production schedules and batch or recipe instructions
 - information on equipment capacity and operating parameters
 - specifications, control points and processing parameters

- sampling schedules and test procedures and equipment
- routine preventative maintenance schedule
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors or realistic scenarios or roleplays.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPDPR2006 Operate a fermentation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the knowledge and skills required to set up, operate, adjust and shut down a fermentation process typically used in the production of dairy products.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of machines and equipment used for the fermentation of dairy products in a dairy production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety codes, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Dairy processing (DPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the fermentation equipment and process for operation	1.1 Confirm materials and personal protective equipment are available 1.2 Identify and confirm cleaning and maintenance requirements according to food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Fit personal protective equipment and adjust machine components and attachments needed for operating requirements 1.4 Enter parameters required to meet safety and operating requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace procedures
2. Monitor the fermentation process operation	2.1 Start up the fermentation process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines, work health and safety and food safety requirements 2.7 Enter information in workplace records in required format
3. Shut down the fermentation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process according to workplace procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the fermentation process
Writing	Complete records according to workplace guidelines using paper-based and/or electronic media

Skill	Description
Numeracy	Confirm process remains within specifications for time and temperature, flow rates and fermenter speeds
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPDPR2006 Operate a fermentation process	FDFDP2006A Operate a fermentation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPDPR2006 Operate a fermentation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all the elements and performance criteria of this unit.

There must be evidence that, on at least one occasion, the individual has set up, operated and monitored, and shut down a fermentation process, including:

- conducted pre-start checks on machinery used for fermentation of dairy products
- started, operated, monitored and adjusted fermentation process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the fermentation process, including the stages and reactions that occur during fermentation
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes

- quality characteristics to be achieved by the fermentation process
- types of starters used and their role in the fermentation process
- quality requirements of materials and effect of variation on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the fermentation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste or rework collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for fermentation equipment
- cleaning procedures for fermentation equipment.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - fermentation and related equipment and services
 - materials to be fermented
 - cleaning materials equipment and procedures
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters
- production schedules and batch instructions
- specifications, control points and processing parameters
- sampling schedules and test procedures and equipment
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors or realistic scenarios or roleplays.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPEGG2001 Work on an egg grading floor

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to determine basic egg characteristics and quality principles in egg production and packing.

This unit applies to individuals who work in egg grading and packing facilities in a poultry production environment in either an operations or quality role.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Egg (EGG)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for egg grading operation	1.1 Identify key work locations and egg grading and packaging equipment on egg grading floor 1.2 Identify grades of eggs packed by the workplace 1.3 Identify trays and packaging used for all orders and location of

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	best before dates on trays and cartons 1.4 Identify storage locations for packed orders prior to despatch 1.5 Identify work health and safety procedures for egg grading, including use of personal protection equipment 1.6 Identify workplace environmental guidelines for egg grading floor operations
2. Recognise egg grades and common egg faults	2.1 Identify different grades of fresh eggs 2.2 Recognise gross, hairline, star cracks, black rot, dirt and other faults in eggs 2.3 Identify defects though the candling process
3. Operate on the egg grading floor	3.1 Confirm method for egg cleaning 3.2 Identify key risks to food safety on egg grading floor, including hazard analysis critical control points (HACCP) plan and egg grading floor critical control points 3.3 Confirm steps and locations for detecting eggs with gross defects 3.4 Identify quality system, including sampling program and tests conducted both on and off the grading floor 3.5 Identify and confirm steps and requirements for the packaging process, including process for printing best before date 3.6 Confirm temperature and humidity requirements for storing eggs

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets standard operating procedures required for working on an egg grading floor
Numeracy	Identifies grades of eggs by weight and size
Navigate the world of	- Applies workplace procedures to own role and responsibilities - Understands main tasks, responsibilities and boundaries of own

Skill	Description
work	role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements • Maintains hygiene standards
Interact with others	• Discuss operational and safety information with relevant personnel using required communication method

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPEGG2001 Work on an egg grading floor	FDFPO2009A Work in an egg grading floor	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPEGG2001 Work on an egg grading floor

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that, on at least one occasion, the individual has:

- identified egg receiving, denester, backpack, pulping and storage equipment and workstations
- identified types and grades of eggs packed within the organisation
- recognised gross, hairline and star cracks, black rot, dirt and other faults in eggs
- identified defects in eggs using the candling process
- identified food safety risks on egg grading floor and critical control points
- identified order control system and trays and cartons used for orders
- identified temperature, humidity and other storage requirements for eggs
- applied food safety procedures to work practices
- followed work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- functions of key work areas, including washing equipment, weighing and automatic fault detection equipment, lanes, denesters, backpack side, quality room and cool rooms
- egg components and purpose, including shell, shell membranes, yolk, albumen and air cell
- common and difference between egg grades
- importance of early grading and packing eggs on freshness
- key egg faults, including types of cracks, faulty colouring, faulty shapes and blood and other inclusions, and the methods used to detect faults
- purpose and methods for egg cleaning
- temperature and humidity requirements for storing eggs and effects of variation from these requirements
- contamination and food safety risks, and related control measures

- environmental issues and controls relevant to the process, including waste or rework collection and handling procedures related to the process
- work health and safety procedures for egg grading, including the use of personal protection equipment
- workplace cleaning and sanitation procedures relevant to the egg grading process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an egg grading and packing workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - egg washing, grading and packing equipment
 - eggs of different grades and condition including eggs demonstrating most common faults
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPEGG2002 Operate egg grading and packing floor equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to operate and monitor specialist egg washing, grading and packaging equipment.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of equipment directly in contact with eggs including washing station, denester and backpack workstations.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPEGG2001 Work on an egg grading floor

Unit Sector

Egg (EGG)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Operate and monitor egg receiving equipment	1.1 Check production schedules for egg type requirements 1.2 Wear appropriate personal protective equipment and ensure

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	correct fit 1.3 Conduct pre-start checks on egg receiving equipment according to operator instructions 1.4 Place eggs requiring manual loading onto conveyor 1.5 Check conveyor, finger sorter and other egg receiving equipment for jams and faults 1.6 Check primary and secondary wash and rinse machines and dryers for correct operation 1.7 Check passage of eggs through crack and leak detectors, and weighing stations to confirm that faulty eggs are being identified and dropped out 1.8 Monitor sorting of eggs into different size lots for conformance to enterprise and job specification
2. Operate and monitor denester side egg packing lanes	2.1 Load printed packaging onto lane take off holders according to production instructions or orders 2.2 Supply the correct number of size and grade of egg pallets and packs to each lane according to customer order 2.3 Enter packing order requirements, including number of eggs per carton or tray, and number of cartons or trays per order type into each lane through key pad terminal 2.4 Undertake mechanical setting of the lane machinery for different size trays where required 2.5 Check setting of best before date printer 2.6 Monitor lanes to ensure that lanes do not run out of egg trays
3. Operate and monitor backpack side egg packing lanes	3.1 Determine number of cartons per order from lane boards or other job instructions 3.2 Monitor packing lanes to ensure trays are being packed into correct outer packaging, and rectify or report any out-of-specification outcomes according to workplace requirements 3.3 Stack trays not requiring packing into outer containers 3.4 Undertake quality checks of eggs throughout all stages of process for compliance with food safety standards and workplace requirements
4. Process damaged and faulty eggs	4.1 Collect and transport containers of faulty eggs from washers and damaged eggs from packing machines to liquid egg processing station

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.2 Sort eggs into edible and inedible waste product according to food safety standards and workplace requirements 4.3 Weigh and record edible waste product within specified time intervals 4.4 Feed faulty and damaged edible eggs to egg breaking or egg pulping machine 4.5 Start egg pulping machine according to workplace procedures 4.6 Monitor temperature of egg pulping machines and report any over-temperatures 4.7 Monitor and adjust speed of pumps to suit pulping and container filling operations 4.8 Weigh, record and dispose of inedible egg waste product according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures for operating egg grading and packing floor equipment
Writing	Complete records according to workplace guidelines
Numeracy	Monitor supply and flow of eggs through washing and packing equipment
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard free work area - Maintain hygiene standards
Interact with others	Report operational information to relevant personnel using required communication method

Skill	Description
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPEGG2002 Operate egg grading and packing floor equipment	FDFPO2010A Operate egg grading and packing floor equipment	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity.	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPEGG2002 Operate egg grading and packing floor equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has operated grading and packing floor equipment at least once, including:

- confirming availability of materials required for specialist egg washing, grading and packaging
- selecting, fitting and using appropriate personal protective equipment
- conducting pre-start checks on machinery used for egg receival, washing, packing and grading
- starting, operating, monitoring and adjusting equipment to achieve required orders and quality outcomes
- monitoring sorting of eggs into different size lots
- taking corrective action in response to jams, other typical faults and inconsistencies in washing, weighing, faulty egg identification and packing
- undertaking quality checks of egg grading, washing and packing process
- correctly changing denester side operation between different size packs
- correctly identifying and matching trays to outer packaging for orders
- correctly weighing, recording and disposing of inedible egg waste product
- completing workplace records in required format
- applying safe work practices and identifying work health and safety hazards and controls
- applying food safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- grading floor layout, including conveyors, washing, drying, weighing and checking equipment, lanes, denester side, backpack side, lane boards and other instruction boards, store rooms and cool rooms

- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- inspection or test points (control points) and the related procedures and recording requirements
- requirements for different types of eggs including cage, barn laid, free range and organic
- common causes of variation in mechanical settings and corrective action required
- workplace health and safety and food safety hazards and controls
- method used for communicating daily orders including lane boards
- purpose of best before dates for egg packaging
- method of setting best before date printer for egg packaging
- type and implication of cracks in eggs
- location and contents of all material safety data sheets (MSDS) for chemicals used in washing and cleaning processes
- types of trays, outer packaging, buckets and other containers used on grading floor and system used to identify containers used for first grade, seconds and defective eggs
- determining first grade, seconds and defective eggs
- maximum collection times for seconds and defective eggs from grading floor collection points
- quality checks, including checks on outer quality, date printing, eggs weights, cleanliness, Haugh unit reading and misshapen and cracked eggs in cartons.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an egg grading and packing workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - egg washing, grading and packing equipment
 - eggs to be processed
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment as required, including MSDS

- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPFAV2001 Apply hydro-cooling processes to fresh produce

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to use hydro-cooling equipment and processes to cool fresh fruit or vegetables in preparation for storage or transportation.

This unit applies to individuals who apply hydro-cooling processes in a food processing environment or at a farm or production site where produce is processed directly after harvest to maximise longevity.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Fruit and Vegetables (FAV)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify hydro-cooling requirements	1.1 Identify key steps in the hydro-cooling process including impact of timing and temperature 1.2 Identify produce for hydro-cooling and confirm specific cooling

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	and transfer requirements 1.3 Check and adjust equipment performance to meet work requirements 1.4 Conduct pre-start checks and prepare personal protective equipment 1.5 Place goods in storage areas to meet storage temperature, stores handling and stock rotation requirements 1.6 Record stores information in required format
2. Conduct hydro-cooling	2.1 Check storage facility for readiness and allocation of space for produce 2.2 Transfer produce in a manner that is safe and maintains produce quality 2.3 Set operating parameters for hydro-cooling equipment to meet safety and cooling requirements 2.4 Apply hydro-cooling to produce according to cooling requirements 2.5 Transfer produce to storage according to workplace procedures 2.6 Record process information in required format 2.7 Maintain the work area according to workplace standards, food safety and work health and safety requirements
3. Monitor hydro-cooling process	3.1 Check temperature to ensure required levels are maintained 3.2 Identify and act on non-compliance issues or problems

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard hydro-cooling information, including impacts of timing and temperature on fresh produce
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	Interpret temperature gauges to monitor hydro-cooling requirements
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	- Maintain quality specifications for fresh produce when applying hydro-cooling processes - Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFAV2001A Apply hydro-cooling processes to fresh produce	FDFV2001A Apply hydro-cooling processes to fresh produce	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPF AV2001 Apply hydro-cooling processes to fresh produce

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- identified handling, hydro-cooling and storage requirements of produce
- set operating parameters to meet work requirements when applying a hydro-cooling process to fresh produce
- monitored temperature to ensure standards are maintained
- handled and transferred produce to maintain required conditions
- completed workplace documentation in required format
- applied food safety procedures
- identified non-conformances
- applied safe work practices and identified work health and safety hazards and controls.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- work health and safety hazards and controls, including the purpose and limitations of protective clothing and equipment
- hydro-cooling facilities and capacities available in the work area
- temperature control requirements of produce handled in the work area, including acceptable temperature ranges, consequences of failing to meet these ranges, and requirements for gradual temperature change
- handling procedures for receiving and locating produce including procedures for identifying, segregating and disposing of damaged or potentially unsafe stock
- stock handling procedures for transferring cooled stock from a temperature-controlled environment, including the maximum duration stock can be held outside a controlled environment

- food safety and quality consequences of stock temperature control requirements not being met
- monitoring procedures and instrumentation, including the use of thermometers or other temperature-measuring instrumentation
- notification, recording and reporting requirements and procedures for apply hydro-cooling processes
- operating procedures for goods handling equipment
- housekeeping requirements for work area.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - hydro-cooling specifications and facilities
 - produce requiring cooling
 - load-shifting equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - stock information recording system and procedures
 - cleaning procedures, materials and equipment
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPFAV3001 Conduct chemical wash for fresh produce

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to implement a wash process for fresh produce where chemicals, including chlorine, are used to achieve quality standards.

This unit applies to individuals who set and monitor levels of cleaning chemicals while conducting wash operations in a food processing production environment. It typically applies to produce that includes leafy greens and fruit, where chemicals are used to ensure required cleaning outcomes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Fruit and Vegetables (FAV)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm required use	1.1 Identify chemicals used for the washing of fresh produce and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
of chemicals	confirm required levels 1.2 Identify hazards and risks associated with using chemicals and implement control measures throughout operations 1.3 Prepare and use personal protective equipment according to workplace safety procedures 1.4 Identify and apply storage and handling requirements for chemicals
2. Prepare for washing operation	2.1 Confirm and prepare raw materials for washing according to production specifications 2.2 Confirm equipment for operational readiness, and fit and adjust components and related attachments 2.3 Carry out pre-start checks according to operator instructions 2.4 Measure chemicals and add dose according to specifications 2.5 Check performance of chemical-dosing equipment to confirm accuracy 2.6 Check water quality and confirm for use
3. Operate and monitor the washing process	3.1 Start and operate the washing process according to operating instructions and work health and safety requirements 3.2 Inspect and wash raw materials to meet workplace specifications 3.3 Check water to confirm correct levels of chemicals 3.4 Transfer washed materials for further processing or packaging 3.5 Identify variation in equipment operation and report maintenance requirements 3.6 Identify, rectify or report out-of-specification product or process outcomes 3.7 Maintain the work area according to workplace procedures, food safety and work health and safety requirements 3.8 Maintain workplace records in required format
4. Shut down the washing process	4.1 Implement the appropriate shutdown procedure 4.2 Handle, store and dispose of chemicals according to workplace procedures and environmental regulations 4.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures and directions for the safe operation of equipment when operating the chemical wash process
Writing	- Record maintenance requirements on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Oral Communication	Actively listen to clarify types of produce required for wash process
Numeracy	Monitor correct ratios of chemicals to amount of water in the wash process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities, and seek clarification or other assistance when required - Maintain hygiene standards and hazard-free work area - Identify and describe own skills, knowledge and experience within context of job role
Interact with others	- Use appropriate vocabulary, including technical language directly relevant to role - Report chemical wash processing performance to relevant personnel using required communication method
Get the work done	- Monitor and maintain quality specifications when operating the chemical wash process - Identify routine problems and implement standard solutions according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFAV3001 Conduct chemical wash for fresh produce	FDFFFV3001A Conduct chemical wash for fresh produce	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPFV3001 Conduct chemical wash for fresh produce

Modification History

Release	Comments
Release 1	This version released with FBPF Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion:

- conducted pre-start checks on machinery used for washing fresh produce
- handled and applied chemicals according to specifications
- started, operated, monitored and adjusted process equipment to achieve required quality outcomes when washing fresh produce
- conducted water and chemical level checks
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- safely shut down equipment
- applied work health and food safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the washing process, including the importance of water quality and the role of chemicals in the washing process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for the chemical wash process and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes

- quality characteristics to be achieved by the washing, including the consequences of out-of-specification moisture levels on further processing and final product
- quality requirements of raw materials and effect of variation on process performance, including how variation in microbial load can affect the washing process
- implications of incorrect chemical levels on fresh produce
- operating requirements, parameters and corrective action required, where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the washing process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures, and recording requirements
- contamination and food safety risks associated with the process and related control measures
- common causes of variation and corrective action required
- workplace health and safety hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
 - isolation, lock out and tag out procedures and responsibilities
 - product or process changeover procedures and responsibilities
 - procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- sampling and testing associated with process monitoring and control
- routine maintenance procedures for washing equipment
- cleaning and sanitation procedures for washing equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - washing equipment and services, including water and chemicals
 - raw materials to be processed
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters
- production schedule and batch instructions
- specifications and inspection or control points
- sampling schedules and test procedures and equipment
- documentation and recording requirements and procedures
- cleaning procedures, materials and equipment
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPFAV3002 Program fresh produce grading equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to program grading equipment to identify key characteristics of fresh produce, and sort accordingly.

This unit applies to individuals who operate mechanical and computer-based technology to sort fresh fruit and vegetables according to key characteristics, including size, weight, density, quality or colour.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Fruit and Vegetables (FAV)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Confirm produce grading specifications	1.1 Identify features of the grading equipment and process 1.2 Examine characteristics of produce and confirm purpose for grading 1.3 Confirm customer and packaging requirements 1.4 Determine specifications for grading based on customer requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Program grading equipment	2.1 Enter grading specifications into equipment 2.2 Use computer program or equipment components to enable a variety of grading outcomes to be achieved 2.3 Test or monitor program or equipment operation against specifications 2.4 Investigate problems or inconsistencies in grading outcomes to determine cause 2.5 Implement corrective action where applicable or report to appropriate personnel 2.5 Complete documentation and records of grading specifications for customer

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures and instructions for the safe operation of grading equipment
Writing	- Record maintenance requirements on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Oral communication	Actively listen to clarify types of fresh produce to be graded and sorted
Numeracy	Estimate sizes and shapes of fresh produce to be graded and sorted
Navigate the world of work	- Apply workplace procedures to own role and responsibilities, and seek clarification or other assistance when required - Maintain hygiene standards and hazard-free work area - Identify and describe own skills, knowledge and experience within context of job role
Interact with others	- Use appropriate vocabulary, including technical language directly relevant to role - Report performance of grading equipment to relevant personnel

Skill	Description
	using required communication method
Get the work done	• Monitor and maintain quality specifications when grading fresh produce • Identify routine problems and implement standard solutions according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFAV3002 Program fresh produce grading equipment	FDFV3002A Program fresh produce grading equipment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPF3002 Program fresh produce grading equipment

Modification History

Release	Comments
Release 1	This version released with FBPF Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion:

- analysed grading requirements and confirmed specifications for grading equipment
- determined grading specifications for a variety of outcomes
- used computing or mechanical technology to achieve grading specifications of fresh produce
- verified program specifications for required outcomes
- analysed non-conformances and grading problems, and determined probable cause
- completed workplace records in required format.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- grading equipment features, processes and technologies
- factors that influence grading outcomes
- typical problems that occur in the grading process, and likely causes and appropriate response options
- characteristics of produce used for grading and the process of identification.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment

- produce, grading equipment and consumables
- specifications:
 - work procedures, including advice on safe work practices, standard operating procedures (SOP), food safety, quality and environmental requirements
 - grading specifications
 - workplace information recording systems, requirements and procedures
 - cleaning procedures, materials and equipment
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPFSY1001 Follow work procedures to maintain food safety

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to maintain food safety when carrying out work tasks. Basic food safety practices include personal hygiene and conduct, food handling, housekeeping and waste disposal related to work tasks and responsibilities where work involves routine manual processes and operation of simple automated equipment.

This unit applies to individuals who work alongside a supervisor in most situations and is relevant to a number of job roles throughout food processing industries at various levels.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety requirements that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Food Safety (FSY)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Handle food safely	1.1 Identify food handling requirements applicable to the workplace 1.2 Carry out food handling as directed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Maintain the workplace in a clean and tidy state
2. Identify, control and report food safety hazards	2.1 Monitor work area, materials, equipment and product routinely to ensure compliance with food safety requirements 2.2 Identify processes, practices or conditions which are not consistent with the food safety program and tell supervisor
3. Comply with personal hygiene standards	3.1 Ensure personal hygiene meets the requirements of the food safety program 3.2 Tell supervisor of any health conditions and illness 3.3 Wear clothing and footwear appropriate for the food handling task 3.4 Follow food safety program requirements when transferring between tasks and locations in the workplace

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace food safety procedures and information - Interpret environmental, recycling and waste disposal guidelines
Writing	- Record information on paper-based and electronic media - Report and document health conditions and illnesses
Numeracy	Monitor and interpret food safety information and data
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures
Interact with others	- Communicate and report information to relevant persons - Ask questions to clarify understanding or seek further information - Cooperate with others to control food safety hazards
Get the work done	Make routine decisions to correct abnormal food safety issues

Skill	Description
	Identify and report problems to appropriate personnel

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPFSY1001 Follow work procedures to maintain food safety	FDFFS1001A Follow work procedures to maintain food safety	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPF SY1001 Follow work procedures to maintain food safety

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all elements and performance criteria in this unit.

There must be evidence that the individual has followed work procedures to maintain food safety on at least one occasion, including:

- locating and following workplace information relating to food safety responsibilities
- monitoring own work and implementing any controls as required by the food safety program, including visual inspections and checks
- following workplace procedures to maintain food safety as required by the food safety program relating to own work
- identifying and correcting or reporting situations that do not meet the requirements of the food safety program and/or could result in unsafe food
- handling, cleaning and storing equipment, utensils, packaging materials and similar items according to the requirements of the food safety program as required by work role
- maintaining personal hygiene consistent with the food safety program
- taking necessary precautions when moving around the workplace and/or from one task to another to maintain food safety
- wearing and maintaining appropriate clothing/footwear as required by work tasks and consistent with the requirements of the food safety program
- reporting health conditions and illness as appropriate according to the food safety program
- handling and/or disposing of out-of-specification or contaminated materials, ingredients and product, waste and recyclable material as required by work responsibilities
- maintaining the work area in a clean and tidy state
- cleaning and sanitising equipment according to workplace procedures
- recording food safety information according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- food safety requirements related to work responsibilities, including personal hygiene, requirements and procedures to report illness and safe food handling practices for own work, as well as the possible consequences of not following these procedures
- common types and sources of contamination that occur in the work area, including cross-contamination
- control methods and procedures used in the workplace, including reporting non-compliance and following instructions
- storage and handling requirements for ingredients, materials and product used related to work role
- housekeeping requirements and responsibilities, and use and storage of housekeeping/cleaning equipment
- purpose and importance of cleaning and sanitation procedures
- suitable standard for materials, equipment and utensils used in the work area
- waste collection, recycling and handling procedures relevant to own work responsibilities
- procedures to follow in the event of pest sighting or discovery of infestation
- clothing and footwear requirements for working in and/or moving between food handling areas
- personal clothing maintenance, laundering and storage requirements
- appropriate bandages and dressings to be used when undertaking food handling
- workplace cleaning procedures
- recording/reporting requirements and responsibilities for workplace food safety.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - appropriate clothing and related apparatus
 - reporting and monitoring systems
- specifications:
 - food safety information relating to the workplace, including a food safety program outlining food safety hazards and control methods
 - related work instructions and procedures
 - work tasks and responsibilities
 - cleaning and sanitation policies and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2001 Operate a bleaching process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a bleaching process to remove colour and impurities from partially refined oil.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of bleaching equipment and processes in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the bleaching equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and productions requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to workplace requirements
2. Operate and monitor the bleaching process	2.1 Start up and operate the bleaching process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product and process outcomes 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the bleaching process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace reporting requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the bleaching process
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	• Monitor control points for time and temperature measurements
Navigate the world of work	• Apply workplace procedures to own role and responsibilities • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements • Maintain a clean and hazard-free work area • Maintain hygiene standards
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2001 Operate a bleaching process	FDFGPS2001A Operate a bleaching process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2001 Operate a bleaching process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for bleaching oil products
- started, operated, monitored and adjusted process equipment used for bleaching oil products to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the bleaching process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a bleaching process and action to take if services are not available
- the flow of the bleaching process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the bleaching process
- quality requirements of materials and effect of variation in oil quality on bleaching process performance

- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the bleaching process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the bleaching process and the related procedures and recording requirements
- contamination/food safety risks associated with the bleaching process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the bleaching process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the bleaching process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for bleaching equipment
- cleaning and sanitation procedures for bleaching equipment.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - bleaching process and related equipment and services
 - oil, catalyst and filter aid as required by the bleaching process used
 - personal protective clothing and equipment
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters

- production schedule/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2002 Operate a complecting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a complector used to produce pastry margarine.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of complecting equipment in an edible oils production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and Product Supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the complector and related equipment for operation	1.1 Confirm materials are available for use in the complector 1.2 Identify and confirm cleaning and maintenance requirements are met 1.3 Fit and adjust machine components and related attachments

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Enter processing or operating parameters according to safety and production requirements 1.5 Check and adjust equipment performance to ensure optimum performance 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the complector process	2.1 Start up and operate the equipment according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product and process outcomes 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the complector process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the complecting process
Writing	Complete records according to workplace guidelines on paper-based and electronic media
Numeracy	Monitor control points for time and temperature measurements
Navigate the world of	Apply workplace procedures to own role and responsibilities

Skill	Description
work	• Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements • Maintain a clean and hazard-free work area • Maintain hygiene standards
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2002 Operate a complecting process	FDFGPS2002A Operate a complecting process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2002 Operate a complecting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used to produce pastry margarine
- started, operated, monitored and adjusted complecting process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down complecting equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- principles of preparing pastry margarine using a complector, including:
 - a basic understanding of crystallisation
 - the relationship between stages of crystal formation, work input and temperature
 - the purpose and requirements of a holding stage
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a complecting process, and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes

- quality characteristics to be achieved by the final pastry margarine
- variations of quality characteristics according to types of pastry margarine produced
- quality requirements of flake used and effect of variation on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection, and handling procedures related to the process and procedures for containing spills
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- operating procedures for related packaging equipment
- routine maintenance procedures for complectors
- cleaning and sanitation procedures for complectors.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - complector and related equipment and services
 - flake to be processed
 - personal protective clothing and equipment
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2003 Operate a deodorising process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a deodorising process to remove the disagreeable flavours and odours from product.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of deodorising equipment and processes, in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the deodorising and related equipment for operation	1.1 Ensure oil stock and emulsion are available to meet production requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Fit and adjust machine components and related attachments 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment to ensure optimum performance 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the deodorising process	2.1 Start up and operate the deodorising process according work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the deodorising process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the deodorising process
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	• Monitor control points for time and temperature measurements, vacuum pressure and steam flow
Navigate the world of work	• Apply workplace procedures to own role and responsibilities • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements • Maintain a clean and hazard-free work area • Maintain hygiene standards
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2003 Operate a deodorising process	FDFGPS2003A Operate a deodorising process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2003 Operate a deodorising process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for deodorising
- started, operated, monitored and adjusted deodorising process equipment to remove disagreeable flavours and odours to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the deodorising process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a deodorising process and action to take if services are not available
- the flow of the deodorising process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the deodorising process
- quality requirements of materials and effect of variation in oil quality on deodorising process performance

- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the deodorising process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the deodorising process and the related procedures and recording requirements
- contamination/food safety risks associated with the deodorising process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the deodorising process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the deodorising process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for deodorising equipment
- cleaning and sanitation procedures for deodorising equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - deodorising process and related equipment and services
 - oil to be deodorised
 - personal protective clothing and equipment
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters

- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2004 Operate a flake preparation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to prepare the oil and water phases and set up, operate, adjust and shut down the flaking process to prepare pastry margarine for further processing through a complector.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of flake preparation equipment and processes in an edible oils production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the flake preparation and related	1.1 Ensure oil stock and emulsion are available to meet production requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
equipment for operation	1.2 Identify and confirm cleaning and maintenance requirements have been met 1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment performance to ensure optimum performance 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the flake preparation process	2.1 Start up and operate the flake preparation process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the flake preparation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the flake preparation process

Skill	Description
Writing	Complete records according to workplace guidelines on paper-based and electronic media
Numeracy	Monitor control points for flake and emulsion temperature, drum speed, flake thickness, and moisture and salt levels
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2004 Operate a flake preparation process	FDFGPS2004A Operate a flake preparation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2004 Operate a flake preparation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for flake preparation
- started, operated, monitored and adjusted flake preparation process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the fractionation process, including:
 - a basic understanding of the chemical structure of oil
 - the effect of fractionation on this structure
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a flake preparation process and action to take if services are not available
- the flow of the fractionation process and the effect of outputs on downstream processes

- quality characteristics to be achieved by the fractionation process
- quality requirements of oil for fractionation and effect of variation on fractionation process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the fractionation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the fractionation process and the related procedures and recording requirements
- contamination and food safety risks associated with the fractionation process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the fractionation process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the fractionation process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for drum and flaking equipment
- cleaning and sanitation procedures for drum and flaking equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - oil and water phase preparation equipment and services
 - drum and flaking equipment
 - oil and ingredients
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters
- production schedule/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2005 Operate a fractionation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down the fractionation process to separate edible oils into two or more liquid and solid parts, each with distinct physical and chemical properties.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a fractionation process in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the fractionation and related equipment for operation	1.1 Ensure oil stock and emulsion are available according to production requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment performance to ensure optimum performance 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the fractionation process	2.1 Start up and operate the fractionation process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production procedures 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the fractionation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the fractionation process

Skill	Description
Writing	Complete records according to workplace guidelines on paper-based and electronic media
Numeracy	- Monitor control points for temperature and flow rates - Monitor supply and flow of materials to and from the fractionation process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2005 Operate a fractionation process	FDFGPS2005A Operate a fractionation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2005 Operate a fractionation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for fractionation
- started, operated, monitored and adjusted fractionation process equipment to separate edible oils into two or more liquid and solid parts, each with distinct physical and chemical properties to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the fractionation process, including a basic understanding of the chemical structure of oil and the effect of fractionation on this structure
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a fractionation process and action to take if services are not available
- the flow of the fractionation process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the fractionation process

- quality requirements of oil for fractionation and effect of variation on fractionation process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the fractionation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the fractionation process and the related procedures and recording requirements
- contamination and food safety risks associated with the fractionation process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the fractionation process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the fractionation process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for fractionation equipment
- cleaning and sanitation procedures for fractionation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - fractionation process and related equipment and services
 - oils and chemicals required for the fractionation process
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions

- specifications, control points and processing parameters
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2006 Operate a hydrogenation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a hydrogenation process to improve the hardness, viscosity, flavour and shelf-life of oils.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a hydrogenation process in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the hydrogenation and related equipment for	1.1 Ensure oil stock and emulsion are available according to production requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
operation	been met 1.3 Enter processing or operating parameters to meet safety and production requirements 1.4 Check and adjust equipment performance to ensure optimum performance 1.5 Conduct pre-start checks according to operator instructions
2. Operate and monitor the hydrogenation process	2.1 Start up and operate the hydrogenation process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the hydrogenation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the hydrogenation process
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	Monitor control points for oil temperature, vacuum pressure, flow rates and hydrogenation quantity and agitation
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2006 Operate a hydrogenation process	FDFGPS2006A Operate a hydrogenation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2006 Operate a hydrogenation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for hydrogenation
- started, operated, monitored and adjusted hydrogenation process equipment to improve the hardness, viscosity, flavour and shelf-life of oils to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the hydrogenation process, including a basic understanding of the chemical structure of oil and the effect of hydrogenation on this structure
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a hydrogenation process and action to take if services are not available
- the flow of the hydrogenation process and the effect of outputs on downstream edible oils and fats processes

- quality characteristics to be achieved by the hydrogenation process
- quality requirements of oil, catalyst and filter aid as used, and effect of variation on hydrogenation process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the hydrogenation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the hydrogenation process, and related procedures and recording requirements
- contamination and food safety risks associated with the hydrogenation process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including an understanding of the hazards associated with the use of hydrogen
- requirements of different shutdowns as appropriate to the hydrogenation process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the hydrogenation process, including waste/rework collection and handling procedures related to the process
- routine maintenance procedures for hydrogenation equipment
- cleaning and sanitation procedures for hydrogenation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - hydrogenation process and related equipment and services
 - oil, catalyst and filter aid as required for the hydrogenation process
 - sampling schedules, and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements

- information on equipment capacity and operating parameters
- production schedule/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2007 Operate an interesterification process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an interesterification process to rearrange the chemical composition of oil molecules.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of an interesterification process in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the interesterification equipment and process	1.1 Ensure materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
for operation	been met 1.3 Enter processing or operating parameters to meet safety and production requirements 1.4 Check and adjust equipment performance to ensure optimum performance 1.5 Conduct pre-start checks according to operator instructions
2. Operate and monitor the interesterification process	2.1 Start up and operate the interesterification process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the interesterification process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the interesterification process requirements
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	Monitor control points for equipment capacity and operating parameters
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2007 Operate an interesterification process	FDFGPS2007A Operate an interesterification process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2007 Operate an interesterification process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for the interesterification process
- started, operated, monitored and adjusted interesterification process equipment to remove impurities from crude oils to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- applied safe work practices and identified work health and safety hazards and controls
- completed workplace records in required format
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the interesterification process, including a basic understanding of the chemical structure of oil and the effect of interesterification on this structure
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for an interesterification process and action to take if services are not available
- the flow of the interesterification process and the effect of outputs on downstream edible fats and oils processes

- quality characteristics to be achieved by the interesterification process
- quality requirements of materials and effect of variation on interesterification process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the interesterification process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the interesterification process and the related procedures and recording requirements
- contamination/food safety risks associated with the interesterification process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the interesterification process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the interesterification process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- sampling and testing associated with the interesterification process monitoring and control where relevant
- routine maintenance procedures for interesterification equipment
- cleaning and sanitation procedures for interesterification equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - interesterification process and related equipment and services
 - deodorised oil required for interesterification and related catalyst
 - sampling schedules, and test procedures and equipment
 - cleaning procedures, materials and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2008 Operate a neutralisation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a neutralisation process to remove impurities from crude oils.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a neutralisation process in an edible oils production environment. Processes may be batch or continuous, and apply to single or multiple product types.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the neutralisation and related equipment for operation	1.1 Ensure oil stock and emulsion are available according to production requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Enter processing or operating parameters to meet safety and production requirements 1.4 Check and adjust equipment performance as required 1.5 Conduct pre-start checks according to operator instructions
2. Operate and monitor the neutralisation process	2.1 Start up and operate the neutralisation process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the neutralisation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the neutralisation process
Writing	Complete records according to workplace guidelines on paper-based and electronic media
Numeracy	Monitor control points for neutralisation process, including oil temperature, pressures, flow rates and chemical dosage

Skill	Description
Navigate the world of work	• Apply workplace procedures to own role and responsibilities • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements • Maintain a clean and hazard-free work area • Maintain hygiene standards
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2008 Operate a neutralisation process	FDFGPS2008A Operate a neutralisation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2008 Operate a neutralisation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for neutralisation
- started, operated, monitored and adjusted neutralisation process equipment to remove impurities from crude oils to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- applied safe work practices and identified work health and safety hazards and controls
- completed workplace records in required format
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the neutralisation process, including the type of alkali used, and the degumming process to prepare oil for neutralisation
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a neutralisation process and action to take, if services are not available
- the flow of the neutralisation process and the effect of outputs on downstream edible oils and fats processes
- quality characteristics to be achieved by the neutralisation process

- quality requirements of inputs and effect of variation in oil quality on neutralisation process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the neutralisation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the neutralisation process and the related procedures and recording requirements
- contamination and food safety risks associated with the neutralisation process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the neutralisation process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the neutralisation process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for neutralisation equipment
- cleaning and sanitation procedures for neutralisation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - neutralisation process and related equipment and services
 - oil required for the neutralisation process, and acid and alkali materials as required by the process
 - sampling schedules, and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters
- production schedule/batch instructions
- specifications, control points and processing parameters
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2009 Operate a soap splitting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a soap splitting process. This may also be referred to as an acid oil process. It covers the splitting of soap stock into an acid oil stream and an acid water stream. This may also be referred to as an acid oil process.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a soap splitting process in an edible oils production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the soap splitting and related equipment for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment performance to ensure optimum performance 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the soap splitting process	2.1 Start up and operate the soap-splitting process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the soap splitting process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the soap splitting process

Skill	Description
Writing	Complete records according to workplace guidelines on paper-based and electronic media
Numeracy	- Monitor control points for pH and temperature of reactors and acid water - Inspect and monitor tank levels
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2009 Operate a soap splitting process	FDFGPS2009A Operate a soap splitting process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2009 Operate a soap splitting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for soap splitting
- started, operated, monitored and adjusted soap splitting process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of soap splitting, including an understanding of the process used to split soap stock and the end uses of each stream
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a soap splitting process and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes, including:
 - the impact of acid water pH on the performance of the effluent plant
 - impact of allowing 'fatty' acid water to flow downstream

- requirements of acid oil and acid water streams to be achieved
- the effect of variation in soap stock on the soap splitting process
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the production process, including the purpose and methods used to conduct relevant tests (including pH, moisture and Free Fatty Acids tests)
- contamination risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including hazards associated with handling hazardous substances
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste or rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for soap splitting equipment
- cleaning and sanitation procedures for soap splitting equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - soap splitting process and related equipment and services
 - materials to be processed
 - personal protective clothing and equipment
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions

- specifications, control points and processing parameters
- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2010 Operate a winterisation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a winterisation process to remove waxes from partially refined oil.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a winterisation process in an edible oils production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the winterisation equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have been met

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment performance to ensure optimum performance 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the winterisation process	2.1 Start up and operate the winterisation process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage 2.5 Identify, rectify or report out-of-specification product and process outcomes according to production specifications 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the winterisation process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the winterisation process
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	• Monitor control points for temperature measurements, vacuum pressure, flow rates and tank levels
Navigate the world of work	• Apply workplace procedures to own role and responsibilities • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements • Maintain a clean and hazard-free work area • Maintain hygiene standards
Interact with others	• Report operational and safety information to relevant personnel using required communication method
Get the work done	• Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2010 Operate a winterisation process	FDFGPS2010A Operate a winterisation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2010 Operate a winterisation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on winterisation machinery and equipment
- started, operated, monitored and adjusted winterisation process equipment to remove waxes from partially refined oil to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the winterisation process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for a winterisation process and action to take if services are not available
- the flow of the winterisation process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the winterisation process
- quality requirements of oil to be winterised and effect of variation on winterisation process performance

- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the winterisation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the winterisation process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the winterisation process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the winterisation process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for winterisation equipment
- cleaning and sanitation procedures for winterisation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - winterisation process and related equipment and services
 - deodorised oil and filter aid as required for winterisation
 - personal protective clothing and equipment
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters

- documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGPS2011 Operate a creamed honey manufacture process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, monitor, and adjust a process to produce creamed honey.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of machines and equipment used to cream honey in a production environment within the honey processing industry.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grocery and product supplies (GPS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the equipment and process for operation	1.1 Confirm liquid and seed honey are available to meet production requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing or operating parameters to meet safety and production requirements 1.5 Check and adjust equipment performance as required 1.6 Conduct pre-start checks according to operator instructions
2. Operate and monitor the creamed honey manufacture process	2.1 Start-up and operate the honey manufacture process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to workplace guidelines 2.7 Enter workplace records in required format
3. Shut down the creamed honey manufacture process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard operating procedures for the creamed honey manufacturing process
Writing	Complete records according to workplace guidelines on paper-based and electronic media

Skill	Description
Numeracy	Monitor control points for time and temperature measurements, vacuum pressure and steam flow
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Maintain a clean and hazard-free work area - Maintain hygiene standards
Interact with others	Report operational and safety information to relevant personnel using required communication method
Get the work done	Solve routine problems according to workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGPS2011 Operate a creamed honey manufacture process	FDFGPS2011A Operate a creamed honey manufacture process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGPS2011 Operate a creamed honey manufacture process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for creaming honey
- started, operated, monitored and adjusted process equipment used for creaming honey to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records in required format
- applied safe work practices, and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic principles of crystallisation, including:
 - an understanding of crystal structure and where appropriate
 - methods used to reduce crystal size
 - the effects of temperature and agitation on crystal formation
 - appropriate ratio of seed to liquid honey
 - factors that influence the crystallisation process, including moisture content and crystal size
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications

- purpose and location of sensors and related feedback instrumentation
- services required for creamed honey manufacture and action to take if services are not available
- quality and organoleptic characteristics of different types of honey processed
- quality characteristics to be achieved by the final product, and related test methods used to confirm quality
- quality requirements of seed and liquid honey used, and the effect of variation on the final product
- operating requirements, parameters and corrective action required where the process is outside specified operating parameters (including ambient and processing temperatures, agitation speeds, and holding times and temperatures)
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor each stage of the production process, including inspecting, measuring and testing as required
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the process and related control measures (this relates specifically to air inclusion and moisture content, and related methods of control)
- common causes of variation and corrective action required
- factors that affect the stability and shelf-life of the finished product and options to extend shelf-life, including storage conditions for packed product
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for creamed honey manufacture equipment
- cleaning and sanitation procedures for creamed honey manufacture equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:

- a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - process and related equipment and services
 - seed and liquid honey
 - personal protective clothing and equipment
 - sampling schedules, and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures
- relationships:
 - interactions with team members and supervisors.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2001 Operate a liquid, mash or block stockfeed process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down process equipment used to produce liquid, mash or block stockfeed.

The unit applies to plant operators involved in the production of liquid, mash and block stockfeeds for a variety of animal species and animal production requirements. Stockfeeds can be prepared as standard products or to particular customer specification.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have been met according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	procedures 1.3 Fit and adjust machine components and related attachments according to operating requirements and safety procedures 1.4 Select, fit and use personal protective equipment according to safety requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment performance to ensure optimum performance 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the liquid, mash or block stockfeed process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Identify, rectify or report out-of-specification product or process outcomes 2.5 Maintain the work area according to work health and safety and food safety procedures 2.6 Maintain workplace records according to workplace procedures
3. Shut down the process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Read and interpret standard stockfeed orders and customer

Skill	Description
	specification requirements
Writing	- Record product information on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Numeracy	- Use correct ratios when adding and mixing ingredients, micronutrients and additives - Read and record temperature measurements
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality specifications when producing different types of stockfeed - Solve familiar and generally predictable problems within workplace guidelines, and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2001 Operate a liquid, mash or block stockfeed process	FDFGR2001A Operate a liquid, mash or block stockfeed process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2001 Operate a liquid, mash or block stockfeed process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- identified and interpreted production and customer requirements for mash, liquid or block stockfeed
- selected, fitted and used personal protective equipment
- conducted pre-start checks on machinery
- started, operated and monitored production equipment to ensure consistency and quality of output
- taken corrective action in response to typical faults and inconsistencies
- added and mixed ingredients, micronutrients and additives as required
- followed quality and contamination avoidance procedures
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each part of the process, including:
 - volumetric metering, mixing, steam conditioning, pouring, pressing, cooling, adding and mixing in micronutrient and other additives to achieve specified proportions
 - sequencing of production to minimise transference and cross-contamination
 - traceability procedures
- basic operating principles of equipment, including:
 - main equipment components

- status and purpose of guards
- equipment operating capacities and applications
- the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- the flow of the stockfeed production process and the effect of outputs on downstream processes
- quality characteristics and uses of finished stockfeed
- effect of variation in inputs and services on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- the effect on final product of variation in variables, including:
 - oil and fat content
 - micronutrient and additive
 - consistency and appearance of mash, liquid or block stockfeed
 - retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition
 - retention time and temperature for liquid addition
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process, and the related procedures and recording requirements
- common causes of variation and corrective action required
- contamination risks and related controls
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
 - routine maintenance procedures
- cleaning and sanitation procedures relevant for producing liquid, mash and block stock feed
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - stockfeed inputs and additives
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - stockfeed orders.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2002 Recognise mill operations and technologies

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to identify mill operations and technologies in a stockfeed mill.

The unit applies to production operators who are required to recognise and work safely and effectively with stockfeed milling materials, equipment, processes and common risks.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Locate stockfeed mill departments, walkways, storage and assembly areas	1.1 Identify raw materials receival and storage areas in mill 1.2 Identify control rooms and other main operator stations in mill 1.3 Identify milling, batch and mixing, pelletising, liquid, mash and block stockfeed production areas

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Identify additive storage in mill 1.5 Locate support services, including maintenance, administration, laboratory and quality assurance, and information technology departments in mill 1.6 Locate finished products storage and despatch areas in mill 1.7 Locate walkways and emergency assembly areas in mill
2. Recognise stages of the mill production process	2.1 Identify main raw materials and source in mill production process 2.2 Identify receival processes, including weighing, volume and quality checks 2.3 Identify milling process in mill production 2.4 Identify batching and mixing processes, including recipe, micronutrients and additives 2.5 Identify post-mixing processes, including pelletising, mashing, pressing and setting 2.6 Locate labelling and packing operations in mill production
3. Identify range of stockfeeds, their purpose and target species	3.1 Identify differences in pellet, mash, liquid and block stockfeeds 3.2 Identify target species and animals for stockfeed mill products 3.3 Recognise properties and benefits of stockfeed
4. Recognise main risks to stockfeed milling operations	4.1 Locate dust control and dust control procedures 4.2 Identify additives requiring special safety and handling procedures 4.3 Locate typical pests and related pest control procedures 4.4 Identify main risks to product quality, including contamination, incorrect recipe adherence, incorrect sequencing and product transference, and incorrect labelling and packaging 4.5 Identify environmental procedures for mill operations

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Read diagrams and sketches - Interpret labelling for a range of stockfeed types
Writing	Record product information on paper-based and electronic media
Numeracy	Apply correct ratios of raw materials and quality characteristics for different types of finished stockfeed
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Describe quality specifications for different types of stockfeed - Describe familiar and generally predictable problems within workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2002 Recognise mill operations and technologies	FDFGR2002A Understand mill operations and technologies	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2002 Recognise mill operations and technologies

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- identified the major steps in the stockfeed production process
- recognised stockfeed products and purposes, including pellets, liquid, mash and block stockfeeds, basic role of additives, typical target species and animals
- located departments, major walkways and assembly areas in the stockfeed mill
- identified major risk , including pests, contamination and incorrect adherence to recipes
- identified environmental procedures for mill operations.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and operating principles of each part of the stockfeed production process, including:
 - volumetric metering, mixing, steam conditioning, pelletising pouring, pressing, cooling, adding and mixing in micronutrient and other additives
 - sequencing of production to minimise transference and cross-contamination
 - traceability procedures
- range of raw materials and typical sourcing procedures
- stockfeed product range and targeted species and animals
- basic operating principles of equipment used and main equipment components
- basic operating principles of process control, including the relationship between control rooms and panels and the physical equipment
- the flow of the stockfeed production process
- quality characteristics and uses of finished stockfeed

- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- methods used to monitor the stockfeed process, including inspecting, measuring and testing as required by the process
- workplace procedures for controlling environmental risks in a mill operation
- contamination risks and related controls relevant to mill operations
- work health and safety hazards and controls, including dust, contamination and materials requiring special handling procedures and emergency assembly areas.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial grain processing mill or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - a range of different types of standard stockfeeds
 - personal protective equipment required to work safely and effectively in a stockfeed mill
 - industrial equipment for processing grain in commercial quantities
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - product specifications
 - mill layout plans.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2003 Operate a grain conditioning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to condition grain by adding water to create a moisture level required for the separation and reduction processes.

This unit applies to individuals who work in a grain processing environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of grain conditioning equipment and processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation and that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the grain conditioning equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met 1.3 Select, fit and use personal protective equipment as required 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment to ensure optimum performance 1.7 Conduct pre-start checks according to operator instructions
2. Operate and monitor the grain conditioning process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify faults and inconsistencies in equipment operation and report maintenance requirements 2.4 Monitor the process to confirm that conditioned product meets grist moisture specifications 2.5 Store conditioned product according to food safety procedures 2.6 Identify, rectify or report out-of-specification product or process outcomes 2.7 Maintain the work area according to work health and safety and operating procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	Read and interpret grain conditioning processing requirements
Writing	- Record product information on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Numeracy	Calculate water addition to suit machine and wheat type
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and environmental care requirements - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality specifications when conditioning different types of grain - Solve familiar and generally predictable problems within workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2003 Operate a grain conditioning process	FDFGR2003A Operate a grain conditioning process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2003 Operate a grain conditioning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for grain conditioning
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the conditioning process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the conditioning process and the effect of outputs on downstream flour milling processes
- quality characteristics to be achieved by the conditioning process

- quality requirements of materials and effect of variation on conditioning process performance
- types of grain and their qualities
- microbiological considerations in conditioning grain
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the conditioning process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the conditioning process and the related procedures and recording requirements
- contamination and food safety risks associated with the conditioning process and related control measures, including potential risks associated with out-of-specification lying times of conditioned grain
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the conditioning process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the conditioning process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a grain conditioning process
- cleaning and sanitation procedures for operating a grain conditioning process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required to set up, operate and monitor grain conditioning equipment and processes
 - types of grain for conditioning
 - grain conditioning additives
 - sample workplace records

- production schedule and batch instructions
- conditioning process and related equipment and services
- specifications:
 - grain conditioning orders
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2004 Operate a grain cleaning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a cleaning process to screen impurities from the grist prior to the conditioning process.

The unit applies to individuals who work in a grain processing environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of grain cleaning equipment and processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the grain cleaning equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met according to food safety requirements 1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Set up the bin system according to operating requirements 1.7 Check and adjust equipment to ensure optimum performance 1.8 Carry out pre-start checks according to operator instructions
2. Operate and monitor the grain cleaning process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Monitor the process to confirm that conditioned product meets grist moisture specifications 2.5 Store conditioned product according to food safety procedures 2.6 Identify, rectify or report out-of-specification product and process outcomes 2.7 Maintain the work area according to work health and safety and operating procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the grain cleaning process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements safely according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret directions for the safe operation of equipment
Writing	Record grain cleaning process using paper-based and electronic media
Numeracy	- Confirm supply of necessary materials and services - Monitor actions including temperature gauges and tank levels
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Communicate and report workplace activity and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality requirements for the sanitisation and use of equipment - Solve familiar and generally predictable problems within workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2004 Operate a grain cleaning process	FDFGR2004A Operate a grain cleaning process	Updated to meet Standards for Training Packages	Equivalent unit

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2004 Operate a grain cleaning process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for grain cleaning
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the grain cleaning process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the grain cleaning process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the grain cleaning process
- quality requirements of materials and effect of variation on grain cleaning process performance

- how and why various kinds of wheat are blended to make grist
- purpose of the break rolls
- how and why the separation of endosperm takes place
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the grain cleaning process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the grain cleaning process and the related procedures and recording requirements
- contamination and food safety risks associated with the grain cleaning process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the grain cleaning process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the grain cleaning process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a grain cleaning process
- cleaning and sanitation procedures for operating a grain cleaning process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment required to operate grain cleaning process
 - grain cleaning equipment and inputs
 - production schedule and batch instructions
 - grain cleaning process and related equipment and services
 - materials required for the grain cleaning process
 - cleaning procedures, materials and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2005 Operate a purification process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and safety knowledge required to set up, operate, adjust and shut down a separation and grading process to remove particles of bran, with or without endosperm or germ attached, from the stock flow.

This unit applies to individuals who work in a stockfeed production environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of stockfeed purification equipment and processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the purification equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met according to food safety requirements 1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment to ensure optimum performance 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the purification process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Monitor the process to confirm that particle size and quantity of stock meets specifications 2.5 Remove fine bran from the semolina and return the bran product with endosperm attached to the purification process or scratch rolls for further processing 2.6 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.7 Maintain the work area according to work health and safety and operating procedures 2.8 Maintain workplace records according to workplace procedures
3. Shut down the purification process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret directions for the safe operation of equipment
Writing	- Record product information on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Numeracy	Use correct ratios when adding and mixing ingredients, including any micronutrients and additives
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2005 Operate a purification process	FDFGR2005A Operate a purification process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2005 Operate a purification process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for purification
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to remove particles of bran, with or without endosperm or germ attached, from the stock flow to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the purification process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the purification process and the effect of outputs on downstream flour milling processes
- quality characteristics to be achieved by the purification process

- quality requirements of materials and effect of variation on purification process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the purification process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the purification process and the related procedures and recording requirements
- contamination and food safety risks associated with the purification process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the purification process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the purification process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a purification process
- cleaning and sanitation procedures for operating a purification process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment required to set up, operate, adjust and shut down a separation and grading process to remove particles of bran
 - production schedule and batch instructions
 - purification process and related equipment and services
 - materials to be purified
 - cleaning procedures, materials and equipment as required
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2006 Operate a scalping and grading process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a production process for the separation of the break stock (chop) into appropriate flows to the next break, purifiers and sizing rolls.

This unit applies to individuals who work in a stockfeed production environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of equipment and processes used for scalping and grading stock.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the scalping and grading equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met according to food safety requirements 1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment to ensure optimum performance 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the scalping and grading process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Ensure that specifications are being at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to work health and safety and operating procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the scalping and grading process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	Interpret directions for the safe operation of equipment
Writing	- Record equipment failure on paper-based and electronic media - Record maintenance requirements on paper-based and electronic media
Numeracy	- Monitor supply and flow of materials to and from the scalping and grading process - Interpret gauges for monitoring equipment operation
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2006 Operate a scalping and grading process	FDFGR2006A Operate a scalping and grading process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2006 Operate a scalping and grading process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for scalping and grading
- started, operated, monitored and adjusted process equipment for the separation of the break stock (chop) into appropriate flows to the next break, purifiers and sizing rolls to achieve required quality outcomes
- selected, fitted and used personal protective equipment
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the scalping and grading process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the scalping and grading process and the effect of outputs on downstream flour milling processes
- quality characteristics to be achieved by the scalping and grading process

- quality requirements of materials and effect of variation on scalping and grading process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the scalping and grading production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the scalping and grading process and the related procedures and recording requirements
- contamination and food safety risks associated with the scalping and grading process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the scalping and grading process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the scalping and grading process, including waste and re-work collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a scalping and grading process
- cleaning and sanitation procedures for operating a scalping and grading process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required for operation and monitoring of equipment and processes used for scalping and grading stock
 - production schedule and batch instructions
 - scalping and grading process and related equipment and services
 - stock required for the scalping and grading process
 - cleaning procedures, materials and equipment as required
- specifications:

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2007 Operate a scratch and sizing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a separation process to ensure as little bran as possible is in the remaining endosperm.

This unit applies to individuals who work in a stockfeed production environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of scratch and sizing equipment and processes

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the scratch and sizing equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	been met according to food safety requirements 1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment to ensure optimum performance 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the scratch and sizing process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to product specifications 2.5 Identify, rectify or report out-of-specification product and process outcomes according to workplace procedures 2.6 Maintain the work area according to work health and safety and operating procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the scratch and sizing process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	Interpret directions for the safe operation of equipment
Writing	- Report equipment failure on paper-based and electronic media - Record out-of-specification product on paper-based and electronic media
Numeracy	Monitor supply and flow of materials to and from the scratch and sizing process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2007 Operate a scratch and sizing process	FDFGR2007A Operate a scratch and sizing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2007 Operate a scratch and sizing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for scratching and sizing
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to ensure as little bran as possible is in the remaining endosperm to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the scratch and sizing process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the scratch and sizing process and the effect of outputs on downstream flour milling processes
- quality characteristics to be achieved by the scratch and sizing process

- quality requirements of materials and effect of variation on scratch and sizing process performance
- operating requirements and parameters, and corrective action required when operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the scratch and sizing production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the scratch and sizing process and the related procedures and recording requirements
- contamination and food safety risks associated with the scratch and sizing process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the scratch and sizing process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the scratch and sizing process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a scratch and sizing process
- cleaning and sanitation procedures for operating a scratch and sizing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required for a stockfeed production environment
 - production schedule and batch instructions
 - specifications, control points and processing parameters
 - scratch and sizing process and related equipment and services
 - stock required for the scratch and sizing process
 - cleaning procedures, materials and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2008 Operate a break roll process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to separate bran from the endosperm.

This unit applies to individuals who work in a grain processing production environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of break roll equipment and processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the break roll equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and ensure cleaning and maintenance requirements have been met according to food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment to ensure optimum performance 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the break roll process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that specifications are met at each stage according to product specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes according to workplace procedures 2.6 Maintain the work area according to work health and safety and operating procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the break roll process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret directions for the safe operation of equipment

Skill	Description
Writing	- Report equipment failure on paper-based and electronic media - Record maintenance requirements on paper-based and electronic media
Numeracy	Interpret gauges for monitoring equipment operation
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2008 Operate a break roll process	FDFGR2008A Operate a break roll process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2008 Operate a break roll process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery and equipment used to separate bran from the endosperm
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to separate bran from the endosperm to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the break roll process, including how and why the endosperm separation takes place
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the break roll process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the break roll process

- quality requirements of materials and effect of variation on break roll process performance, including the effect of moisture variation and related scope to adjust process throughput
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - symptoms of chokes, blockages or breaches and action required to clear
- methods used to monitor the break roll process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the break roll process and the related procedures and recording requirements
- contamination and food safety risks associated with the break roll process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the break roll process and workplace production requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the break roll process, including waste and rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for operating a break roll process
- cleaning and sanitation procedures for operating a break roll process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required for a grain processing production environment
 - production schedule and batch instructions
 - break roll process and related equipment and services
 - conditioned grain suitable for the break roll process

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2009 Operate a pelleting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down process equipment to compress mash into pellets and to finish pellets.

The unit applies to individuals who work in a stockfeed production environment. It typically targets the production worker responsible for applying basic operating principles to the operation and monitoring of pelleting equipment and processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the pelleting equipment and process for operation	1.1 Confirm materials are available according to operating requirements 1.2 Identify and confirm cleaning and maintenance requirements have been met according to food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Select, fit and use personal protective equipment 1.4 Fit and adjust machine components and related attachments according to operating requirements 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Check and adjust equipment performance to ensure optimum 1.7 Carry out pre-start checks according to operator instructions
2. Operate and monitor the pelleting process	2.1 Start and operate the process according to work health and safety and operating procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Confirm that product specifications are being met at each stage according to production specifications 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to work health and safety and operating procedures 2.7 Maintain workplace records according to workplace procedures
3. Shut down the pelleting process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret directions for the safe operation of equipment

Skill	Description
Writing	- Record out-of-specification product on paper based and electronic media - Record maintenance requirements on paper based and electronic media
Numeracy	- Monitor supply of liquid ingredients to post-mixing process - Interpret gauges for monitoring equipment operation
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2009 Operate a pelleting process	FDFGR2009A Operate a pelleting process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2009 Operate a pelleting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- conducted pre-start checks on machinery used for pelleting
- selected, fitted and used personal protective equipment
- started, operated, monitored and adjusted process equipment to compress mash into pellets and to finish pellets to achieve required quality outcomes
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each part of the process, including volumetric metering, steam conditioning, pellet formation, cooling, crumbling and sieving and post-pelleting liquid addition
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment

- the flow of the pelleting process and the effect of outputs on downstream processes
- quality characteristics and uses of finished pellets
- effect of variation in inputs and/or services on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- the effect on final product of variation in variables, including:
 - pellet diameter to length ratios
 - oil and fat content
 - retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition
 - retention time and temperature for liquid addition
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the pelleting process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation and corrective action required
- contamination risks related to the pelleting and pellet finishing process and related controls
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace pelleting requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls, including waste/rework collection and handling procedures
- routine maintenance procedures for operating a pelleting process
- cleaning and sanitation procedures for operating a pelleting process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required to stockfeed inputs and additives

- personal protective clothing and equipment required to set up, operate, adjust and shut down a separation process
- production schedule/batch instructions
- pelleting, pellet finishing and related equipment and services
- feed/mass to be pelleted
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2010 Handle grain in a storage area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to handle grain in a storage area, including taking samples, segregating and moving grain in a manner that minimises dust and exposure to pests.

This unit applies to individuals who work in a grain processing environment for human or stock consumption. It typically targets the production worker responsible for applying basic operating principles to the storage of grain in permanent or temporary storage facilities.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Sample grain for testing	1.1 Select, fit and use personal protective equipment according to work health and safety and food safety requirements 1.2 Take representative samples of grain for testing according to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace procedures and food safety requirements 1.3 Prepare samples for despatch, including labelling and packaging according to food safety and workplace requirements
2. Move grain into and out of storage	2.1 Identify grain for handling and storage according to food safety and workplace requirements 2.2 Select appropriate silo types and handling equipment for various grains in relation to their storage characteristics and flow properties 2.3 Conduct pre-start checks on machinery and equipment used for grain storage and transfers 2.4 Start, operate, monitor and adjust process equipment 2.5 Segregate grain according to type, variety and quality characteristics and keep appropriate records 2.6 Take steps to minimise pest infestation according to work health and safety and food safety requirements 2.7 Move grain safely into and out of storage according to work health and safety and food safety requirements 2.8 Check grain regularly during movement for contamination according to work health and safety and food safety requirements 2.9 Clean storage and handling equipment thoroughly after emptying according to food safety requirements 2.10 Dismantle temporary storages according to work health and safety and food safety requirements 2.11 Implement suitable measures to minimise the effect of desiccant dusts on the flow properties of grain
3. Shut down the grain cleaning process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret directions for the safe operation of equipment
Writing	Record out-of-specification results on paper-based and electronic media
Numeracy	- Store grain to achieve volume and space requirements - Determine equipment capacity and operating parameters
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2010 Handle grain in a storage area	FDFGR2010A Handle grain in a storage area	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2010 Handle grain in a storage area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- taken required samples
- selected, fitted and used personal protective equipment
- conducted pre-start checks on machinery and equipment used for grain storage and transfers
- started, operated, monitored and adjusted process equipment
- recognised different grain types and varieties
- checked grain for pest and other contamination
- taken corrective action in response to typical faults and inconsistencies
- completed workplace records as required
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices where grain is intended for human consumption.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- grain hygiene and sealing requirements
- grain varieties and types
- segregation requirements to maintain integrity and quality of grain
- flow of grain in storage area from receipt to despatch
- typical storage equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems

- contamination and food safety risks associated with the grain storage process and related control measures
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the grain storage process and workplace requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- environmental issues and controls relevant to the grain storage process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for handling grain in a storage area
- cleaning and sanitation procedures for handling grain in a storage area.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required to handle grain in a storage area
 - grain storage and transfer equipment and services
 - materials required for the grain storage process
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - storage and transfer instructions.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2011 Receive grain for malting

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to receive grain intended for malting from road, rail or sea transport, including checking of documentation, weighing, conducting pest, contamination and other initial checks, and placement of grain into storage.

The unit applies to operators in commercial malting plants who are responsible for receiving grain from farmers or agents for malting. The grain received in most cases will be barley but may also be wheat. The unit covers the grain receipt process where operators determine or work with others to determine if delivered grain should be accepted, including checking of documentation, sampling and testing, screening and storage.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPGRA2010 Handle grain in a storage area

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Receive grain from transport	1.1 Access and check delivery documentation according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Select, fit and use personal protective equipment according to work health and safety requirements 1.3 Determine required tests for delivered grain from standard operating procedures, supervisor instruction or other source 1.4 Test samples of grain for the required parameters to determine if the delivery is within specifications 1.5 Follow procedures for rejected grain
2. Weigh and screen accepted grain	2.1 Off load grain from transport and route to screens 2.2 Confirm equipment status and condition according to workplace procedures, including safety requirements 2.3 Set up, start and monitor grain transfer and weighing equipment 2.4 Pass intake grain through screens according to operating procedures 2.5 Monitor size of grain corn according job specifications 2.6 Follow dust control procedures according to workplace procedures, including safety requirements 2.7 Pass grain through metal removal equipment according food safety requirements 2.8 Weigh grain according to operating procedures
3. Store intake grain	3.1 Determine moisture and protein content of grain 3.2 Route screened grain to batch bins or other containers
4. Shut down process and complete work	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process safely according to operating procedures 4.3 Clean and sanitise equipment according to according to work health and safety and food safety procedures 4.4 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret enterprise procedures and specifications for receiving grain - Interpret directions for the safe operation of equipment
Writing	- Record product information on paper-based and electronic media - Comply with procedures and responsibilities for reporting problems
Numeracy	Set up, start, operate and monitor grain transfer and weighing equipment
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Identify faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2011 Receive grain for malting	FDFGR2011A Receive grain for malting	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2011 Receive grain for malting

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- accessed workplace information to identify grain receipt procedures, including:
 - specifications
 - required sampling and tests
 - reporting arrangements
- selected, fitted and used personal protective equipment
- confirmed equipment status and condition
- set up, started, operated and monitored grain transfer and weighing equipment
- undertaken sampling and testing of grain according to enterprise procedures
- applied enterprise procedures for rejection of out-of-specification grain
- monitored critical control points in work area
- applied dust control procedures in work area
- maintained workplace records
- applied safe work practices and identifying work health and safety hazards and controls.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- grain delivery arrangements and transport modes
- location and types of storage available for received grain
- enterprise procedures for rejected grain
- identification, avoidance and safe handling of accidental residues of insect treatment from ex-site storages, including phosphine bags
- other contamination avoidance and removal procedures, including:

- jewellery and loose objects in work area
- security and access procedures to work areas
- pest control procedures
- metal and other foreign objects detection and removal
- dust control procedures for receipt of grain
- cleaning requirements associated with changeovers and types of shutdowns
- procedures for reporting problems
- work health and safety hazards and controls relevant to receipt of grain
- sampling and testing procedures for grain receipt
- cleaning and sanitation procedures for grain receipt.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required to receive grain for malting
- specifications:
 - work procedures including advice on safe work practices, food safety and environmental requirements
 - information on specifications, control points and grain handling procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2012 Prepare malted grain

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to operate commercial equipment associated with preparing malted barley or wheat. It covers operating and monitoring steeping, germinating, and kilning equipment.

The unit applies to operators in commercial malting plants who are responsible for converting stored grain into malted barley or wheat. These operators are often known as maltsters.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPGRA2010 Handle grain in a storage area

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Steep grain	1.1 Identify work requirements with relevant personnel 1.2 Select, fit and use personal protective equipment according to work health and safety requirements 1.3 Confirm equipment status and condition

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Set up, start and monitor equipment according to operating procedures 1.5 Transfer grain from storage into steeping equipment according to workplace procedures 1.6 Place hoses or other wetting equipment correctly to ensure uniform hydration and to avoid damage to grain 1.7 Immerse, drain and rest grain for the specified number of cycles 1.8 Monitor moisture content of grain during air resting to determine when it is ready for transfer to germination vessels 1.9 Discharge wastewater to treatment or holding or other facilities according to workplace procedures
2. Germinate grain	2.1 Feed grain into germination vessel or floor according to workplace procedures 2.2 Set up, operate and monitor turning and air blowing equipment to meet safety and production requirements 2.3 Monitor green grain for humidity, temperature, moisture, chitting or acrospires, and general condition 2.4 Adjust rate of turning, humidity and temperature according to specifications for malt type 2.5 Transfer modified green grain to kiln according to specifications for malt type and results of laboratory testing
3. Operate kiln to produce malt	3.1 Conduct first drying of modified grain 3.2 Confirm germination has stopped according to workplace procedures 3.3 Cure modified grain through correct combination of air flow and heat for malt product specification 3.4 Confirm colour, moisture content and other required specifications 3.5 Clean the malt according to workplace procedures and food safety requirements 3.6 Transfer separated culm to storage according to workplace procedures 3.7 Transfer malt to storage according to workplace procedures
4. Shut down process and complete work	4.1 Identify the appropriate shutdown procedure

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.2 Shut down the process safely according to operating procedures 4.3 Clean and sanitise equipment according to work health and safety and food safety procedures 4.4 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace environmental procedures and controls - Interpret waste handling requirements and procedures - Interpret directions for the safe operation of equipment
Writing	- Record production data on paper-based and electronic media - Record equipment failure on paper-based and electronic media
Numeracy	- Identify batch and recipe specifications and seek assistance and relevant approvals - Achieve specified moisture content in grain through correct combinations of water and air steeping cycles - Correctly adjust kiln heat settings for drying or curing and for different types and grades of barley and malt
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2012	FDFGR2012A	Updated to meet	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
Prepare malted grain	Prepare malted grain	Standards for Training Packages	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2012 Prepare malted grain

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has operated commercial equipment associated with preparing malted barley or wheat, on at least one occasion, that includes:

- accessed workplace information and consulted with relevant personnel to identify batch requirements for steeping, germination, kilning and malt cleaning processes
- selected, fitted and used personal protective equipment
- confirmed equipment status and condition
- set up, started and monitored grain transfer equipment
- controlled absorption of water by grain during steeping to achieve specified water content
- supplied fresh air, heating, cooling and ventilation to specification during germination
- safely started and operated kilns to different heat requirements
- undertaken sampling and testing during steeping, germination and cleaning to determine if grain and malt is within specifications
- monitored critical control points in work area
- applied dust control procedures in work area
- applied safe work practices and identified work health and safety hazards and controls
- maintained workplace records
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- changes to grain from the steeping process
- changes in grain during germination
- role of humidity and temperature in initiating and controlling germination of grain

- common variations in grain quality and type
- common customer malt 'recipes' used in the enterprise and implications for malt production
- standard transfer times between stages, including receiving to steeping, steeping to germination, and germination to kilning
- procedures for dealing with contingencies, breakdowns and other non-standard events for preparing malted grain
- contamination avoidance procedures for preparing malted grain, including:
 - jewellery and loose objects in work area
 - security and access procedures to work areas
 - pest control procedures
- appearance of grains before and after cleaning (deculming)
- cleaning requirements associated with changeovers and types of shutdowns for preparing malted grain
- purpose of moisture and acrospires testing within the malting process
- work health and safety hazards and controls relevant to preparing malted grain
- equipment cleaning and sanitation procedures relevant to preparing malted grain.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required to operate commercial equipment associated with preparing malted barley or wheat
 - steeping, germination, kilning and deculming equipment and control points - steeping, germination, kilning equipment may be separate or combined
 - malted grain cleaning equipment
- specifications:
 - work procedures including advice on safe work practices, food safety and environmental requirements
 - steeping, germination and kilning specifications and procedures for at least two different malts.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2013 Blend and dispatch malt

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to operate commercial equipment associated with blending malted barley or wheat to specifications and dispatching wheat to customers.

This unit applies to operators in commercial malting plants who are responsible for blending malted barley or wheat and then dispatching the malt to customers. These operators are often known as maltsters.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Blend malt to specification	1.1 Obtain blend specification from management or other source 1.2 Select, fit and use personal protective equipment according to safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm availability of source malts and storage locations according to operating requirements 1.4 Confirm equipment status and condition according to work health and safety and food safety procedures 1.5 Set up, start and monitor blending equipment and controls to achieve desired ratio and volume 1.6 Transfer blended malt to storage according to workplace procedures
2. Dispatch malt	2.1 Obtain customer order or other dispatch authority 2.2 Confirm availability of order volume and blend of malt to meet safety and production requirements 2.3 Confirm availability of conveyor or dispatch transport and position if required 2.4 Conduct pre-delivery sampling and tests according to specifications 2.5 Screen and dispatch malt for dispatch to transport 2.6 Make record of dispatch according to workplace procedures
3. Shut down process and complete work	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Clean and sanitise equipment according to work health and safety and food safety procedures 3.4 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret environmental procedures and controls - Interpret directions for the safe operation of equipment

Skill	Description
Writing	- Record equipment failure on paper-based and electronic media - Record maintenance requirements on paper-based and electronic media
Numeracy	- Monitor supply and flow of materials for blending malted barley or wheat - Interpret gauges for monitoring equipment operation
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Use oral communication skills as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Communicate and report operational and safety information to relevant personnel
Get the work done	- Undertake required corrective actions in the event of variation to blend specifications and operating parameters - Deal with contingencies, breakdowns and other non-standard events - Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2013 Blend and dispatch malt	FDFGR2013A Blend and dispatch malt	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA2013 Blend and dispatch malt

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence, on at least one occasion, that the individual has:

- accessed workplace information to identify blending requirements
- accessed workplace information to identify malt dispatch requirements, including malt type and amount, mode of transport, and screening and testing requirements
- selected, fitted and used personal protective equipment
- confirmed equipment status and condition
- set up, started and monitored blending equipment
- undertaken required sampling and testing during blending and dispatch
- monitored critical control points in work area
- maintained workplace records
- applied safe work practices and identified work health and safety hazards and controls
- safely shut down equipment
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- common terms for malt types and blends
- malts used in the enterprise and their relationship to blends required by customers
- purpose and basic principles of the blending process
- basic operating principles of equipment used to blend and dispatch malt, including main equipment components, equipment operating capacities and applications
- loading techniques for modes of dispatch used in the workplace
- cleaning requirements associated with changeovers and types of shutdowns for blending and dispatching malt

- procedures for dealing with contingencies, breakdowns and other non-standard events relevant to blending and dispatching malt
- contamination avoidance procedures relevant to blending and dispatching malt, including:
 - jewellery and loose objects in work area
 - security and access procedures to work areas
 - pest control procedures
- sampling and testing procedures for blending and dispatching malt
- cleaning and sanitation procedures relevant to the production process for blending and dispatching of malt.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment required for operators in commercial malting plants
 - malt of different types for blending
 - blending equipment
 - dispatch and malt transport equipment
- specifications:
 - work procedures including advice on safe work practices, food safety and environmental requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA2014 Operate a rice vitamin enrichment process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to operate a rice vitamin enrichment process.

The unit applies to individuals who are production workers in a rice processing environment responsible for applying operating principles under general supervision with limited autonomy and accountability.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the rice vitamin enrichment process for operation	1.1 Ensure raw materials are available to meet operating requirements 1.2 Identify and confirm the status of cleaning and maintenance requirements

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Fit and adjust machine components and related attachments according to operating requirements 1.4 Enter processing/operating parameters to meet safety and production requirements 1.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 1.6 Conduct pre-start checks according to workplace instructions 1.7 Select and fit personal protection equipment
2. Operate and monitor the rice vitamin enrichment process	2.1 Start and operate process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions 2.3 Identify variation in equipment operation, and report maintenance requirements according to workplace reporting procedures 2.4 Ensure enriched product meets specifications 2.5 Store vitamin enriched product according to food safety requirements 2.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 2.7 Ensure workplace meets housekeeping standards 2.8 Maintain workplace records according to workplace recording requirements
3. Shut down the rice vitamin enrichment process	3.1 Identify appropriate shutdown procedure 3.2 Shut down the process safely according to workplace procedures 3.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description

Reading	Interprets and consolidates test results and data from a range of sources, relevant to vitamin enrichment requirements
Writing	Prepares records and basic reports using clear language, correct spelling and terminology, and accuracy of information
Numeracy	Performs basic mathematical calculations to determine weights and measures for product enrichment process
Oral communication	Uses clear language, concepts, tone and pace appropriate when reporting to others
Navigate the world of work	Complies with explicit policies and workplace procedures, and explores and implements, where identified, the implicit expectations
Interact with others	Identifies and takes steps to follow a limited range of accepted communication practices and protocols in a work environment
Get the work done	- Makes low-impact decisions within familiar situations, based on a range of predefined or routine solutions, and evaluates the effectiveness of the outcome - Responds to predictable routine problems, and implements standard or logical solutions - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA2014 Operate a rice vitamin enrichment process	ZRGRPVE2A Operate a rice vitamin enrichment process	Updated to meet Standards for Training Packages Minor changes to performance criteria	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBP GRA2014 Operate a rice vitamin enrichment process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a rice vitamin enrichment process on at least three occasions, including:

- accessed workplace information to identify rice vitamin enrichment processing requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- took corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the rice vitamin enrichment process
- responded to and/or reported equipment failure within level of responsibility
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice vitamin enrichment process, including:
 - understanding of the ingredients and additives used
 - understanding the role of each ingredient and additive in the final product
 - process flow and the effect of rice vitamin enrichment process on the end product
 - product handling and storage requirements

- additives and raw materials/ingredients combined to create a finished product
- materials used in vitamin enrichment, including:
 - additives
 - ingredients
 - chemicals
 - long or medium grain
 - broken
- basic operating principles of equipment, including:
 - basic operating principles of mixers, sieves, weighing equipment, raw materials transfer equipment and drying equipment
 - an operational understanding of main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action
 - requirements of materials and effect of variation in raw materials and/or rice variety on the rice vitamin enrichment preparation process
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - identification of typical equipment faults and related causes
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice vitamin enrichment process, including:
 - inspecting
 - measuring
 - testing
 - time/temperature

- flow rates
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - rice vitamin enrichment equipment and services
 - raw materials required for the vitamin enrichment process
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity
 - equipment operating instructions, manuals and parameters
 - production schedule
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3001 Work with micronutrients or additions in stockfeed manufacturing processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to select and use micronutrients and additives when undertaking stockfeed manufacturing.

This unit applies to individuals who handle, use and record micronutrients and additives used in stockfeed production.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify finish feed requirement	1.1 Identify product to be manufactured from production schedule, customer order or standard operating procedure (SOP) 1.2 Identify micronutrient or additive requirements from screen,

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	recipe, SOP or supervisor
2. Obtain correct micronutrient or other additive	2.1 Identify storage location for micronutrient or additive according to workplace requirements 2.2 Obtain micronutrient or additive according to SOP 2.3 Read micronutrient or additive label to determine any special mixing, handling or work health and safety requirements 2.4 Discuss with nutritionist and other professional and technical staff on micronutrients and additives requirements of stockfeed as required
3. Add micronutrient or additive to product	3.1 Match micronutrient or additive to product 3.2 Determine appropriate volume, measurement or proportion of micronutrient or additive 3.3 Undertake pre-mixing or other micronutrient or additive preparation procedures to meet safety and production requirements 3.4 Add micronutrient or additive to stockfeed at appropriate location and stage of production process to ensure product is manufactured according to specifications 3.5 Follow appropriate contamination, quality and sequencing procedures according to work health and safety and food safety procedures 3.6 Take stockfeed samples according to workplace procedures
4. Record use of micronutrient or additive	4.1 Record type and amount of micronutrient or additive used in required format 4.2 Generate correct product labels and add to product using required method

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret names of micronutrients and additives

Skill	Description
	Read and check information on labels to identify target and non-target species, dose/addition level, withholding period, expiry dates, storage and handling requirements, manufacturer name, product and active ingredient name
Writing	Record use of micronutrients and additives on paper-based and electronic media
Numeracy	- Follow mixing and addition procedures for micronutrients and additives - Use correct volume, measurements and proportions
Navigate the world of work	- Interpret and follow regulatory requirements and seek clarification or other assistance when required - Identify and describe own skills, knowledge and experience within context of job role - Seek advice and feedback on current work performance
Interact with others	- Liaise with professional and technical staff on micronutrients and additives requirements of stockfeed - Use oral communication skills and language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Use appropriate vocabulary, including technical language directly relevant to role - Ask questions to clarify understanding or seek further information - Recognise personal strengths and challenges associated with interacting with others in the workplace

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3001 Work with micronutrients or additions in stockfeed manufacturing processes	FDFGR3001A Work with micronutrients or additions in stockfeed manufacturing processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3001 Work with micronutrients or additions in stockfeed manufacturing processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence, on at least one occasion, that the individual has:

- identified and interpreted micronutrients and additives requirements from stockfeed recipes and production schedules
- related micronutrients and additives to correct stockfeed
- added micronutrient or additive to product following correct contamination, quality and sequencing procedures
- liaised with nutritionist and other professional and technical staff on micronutrients and additives requirements of stockfeed
- taken appropriate samples
- recorded use of micronutrient or additive
- generated correct labels
- applied safe work practices and identified work health and safety hazards and controls
- applied food safety procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- contamination avoidance, quality and sequencing procedures when using micronutrients or additives in stockfeed manufacturing processes
- risk factors for cross-transference for stockfeed manufacturing
- preparation procedures required for using micronutrients and additives in stockfeed manufacturing
- sampling techniques for using micronutrients and additives in stockfeed manufacturing
- mathematical techniques to determine appropriate volume, measurement or proportion of micronutrient or additive in the manufacture of stockfeed

- withholding periods that may be required when manufacturing stockfeed
- work health and safety procedures for using micronutrients and additives in stockfeed manufacturing.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a grain processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to stockfeed manufacturing in the workplace
 - sample micronutrients or additives
 - stockfeed product
 - sample product recording system
- specifications:
 - sample production schedule, customer order or standard operating procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3002 Apply knowledge of animal nutrition principles to stockfeed product

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to identify animal nutrition principles required in stockfeed and confirm these requirements with nutritionists, and other technical and professional staff and customers.

This unit applies to stockfeed operators who are required to have knowledge of animal nutrition principles and the effect of stockfeed on animal performance. This knowledge would be applied in liaison with professional and technical staff on customer requirements and in liaison directly with customers.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine stockfeed requirements	1.1 Identify target species, animal type and phase of animal growth supported by stockfeed product 1.2 Confirm production purpose of animal raising and range of desired

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	products in consultation with the customer 1.3 Determine particle size, pellet quality and other factors affecting palatability for target animals 1.4 Identify impact of stockfeed on animal performance
2. Evaluate key quality factors affecting stockfeed performance	2.1 Identify feed safety requirements for target species and phase of animal production 2.2 Identify type and proportion of raw materials in stockfeed and their effect on animal performance with advice from professionals 2.3 Determine the purpose of additives on animal performance and stockfeed quality 2.4 Determine effects of processing on stockfeed nutrition quality and animal performance with advice from professionals 2.5 Recognise substitution guidelines, including the effect of substitution on stockfeed performance

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Access and interpret workplace information, including standard operating procedures (SOP), labels, recipes, customer supplied information, and material data safety sheets (MSDS)
Writing	- Record customer requirements and specifications for stockfeed on paper-based and electronic media - Use and apply workplace terminology
Numeracy	- Calculate amounts of stockfeed required according to customer requirements - Sequence information against production processes
Navigate the world of work	- Interpret and follow regulatory requirements and seek clarification or other assistance when required - Identify and describe own skills, knowledge and experience within context of job role

Skill	Description
	Seek advice and feedback on current work performance
Interact with others	- Liaise with professional and technical staff on animal nutrition requirements of stockfeed - Use oral communication skills and language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor - Ask questions to clarify understanding or seek further information regarding customer requirements - Recognise personal strengths and challenges associated with interacting with others in the workplace
Get the work done	- Identify resources in the workplace for further information, including nutritionists, other technical and professional specialist and reference materials - Maintain hygiene standards and wear required personal protective equipment - Identify routine problems and implement standard solutions as required

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3002 Apply knowledge of animal nutrition principles to stockfeed product	FDFGR3002A Demonstrate knowledge of animal nutrition principles	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3002 Apply knowledge of animal nutrition principles to stockfeed product

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence, on at least one occasion, that the individual has:

- identified target species, animal type and phase of animal growth supported by stockfeed product
- identified and interpreted customer requirements from stockfeed
- related stockfeed type to animal nutrition and production requirements
- liaised with nutritionist and other professional and technical staff on animal nutrition requirements of stockfeed.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- typical nutrition requirements of animals supported by stockfeed, including horses, beef cattle, dairy cattle, pigs, sheep, poultry (both meat and egg production) and marine animals (aquaculture). Knowledge would be restricted to standard daily requirements of main food groups (proteins, carbohydrates etc.), typical daily volume of feed required and type of feed (solid, liquid, plant or animal based)
- how nutritional needs of target animal may vary according to species, gender, health, pregnancy, lactation, age, season, geography, production purpose and form of production and feeding (feedlot, free range, use of stock feed for supplementary or full feeding)
- factors affecting animal acceptance of stockfeed, including palatability and presentation
- range of raw materials typically used in stockfeed, including grains, molasses/liquids, proteins (vegetables and animal), additives (vitamins, minerals and medications) and fibre
- impact of operator-controlled factors on stockfeed quality, including temperatures, moisture, sizing, sieving and liquid additions

- impacts of stockfeed on animal performance, including positive effects on animal performance and effects of incorrect feed on animal safety, animal performance and export contamination.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to providing advice regarding stockfeed products and processes in the workplace
 - sample customer enquiries and orders
 - stockfeed raw materials
- specifications:
 - reference and resource materials about stockfeed products and processes
 - animal nutrition requirement information
 - stockfeed data, formulas/recipes
- relationship (internal and/or external):
 - access to customers, nutritionists or other livestock professionals.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3003 Lead flour milling shift operations

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to lead milling operations during a shift, including acting as a technical resource to other mill employees.

This unit applies to a miller who is responsible for the flour mill operations during a shift and relates to the milling of all grains for flour and other milling processed food and non-food products.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish shift operating environment	1.1 Identify products and quantities to be produced by mill during shift 1.2 Identify from authorised suppliers, the supplier of grain used during shift and the varieties supplied

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Apply required costing and control procedures to achieve set key performance indicators (KPIs) 1.4 Establish range of available equipment and any unique design or operating factors 1.5 Identify staffing and work organisation for shift 1.6 Identify any budget and/or budget operating procedures relevant for shift operations
2. Monitor quality during shift	2.1 Identify specifications for flour to be produced during shift 2.2 Identify performance indicators and production targets for mill and mill departments during shift 2.3 Supervise testing regime for mill during shift 2.4 Monitor performance against targets and indicators 2.5 Report non-conformances and take appropriate corrective actions
3. Set and supervise grain supply and intake procedures	3.1 Supervise grain receipt operations, including compliance with instructions for rejected deliveries 3.2 Set screening criteria and procedures for re-use of screenings 3.3 Set blending criteria for holding bins/silos
4. Set and supervise grain conditioning process and specifications	4.1 Specify and communicate grain cleaning requirements to operators 4.2 Set water volume for each grain batch 4.3 Set conditioning time per batch 4.4 Determine any blending and treatment criteria 4.5 Monitor tests and specifications for conditioned grain 4.6 Supervise transfer to storage or mill
5. Supervise production	5.1 Identify shift production targets 5.2 Obtain or determine recipes 5.3 Formulate and supervise preparation of grist 5.4 Supervise milling of individual grains 5.5 Set blending requirements, including any use of additions and adjuncts 5.6 Allocate production specifications for shift to departments 5.7 Ensure production records are kept

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.8 Monitor production against targets
6. Integrate maintenance schedule with shift operations	6.1 Identify shift preventative maintenance requirements from maintenance department and/or equipment suppliers 6.2 Supervise equipment monitoring and maintenance responsibilities for operators, maintenance department and other staff 6.3 Identify and approve timing for any regular maintenance activities that will disrupt production 6.4 Supervise breakdown notification and repair procedures
7. Implement risk management procedures	7.1 Supervise implementation of workplace health and safety and dust control procedures 7.2 Monitor Hazard Analysis and Critical Control Points (HACCP) procedures during shift 7.3 Monitor compliance with environmental and sustainability regulations and targets 7.4 Monitor operations against any required regulatory compliance, including required reporting procedures
8. Provide guidance to other mill employees	8.1 Monitor and maintain standard operating procedures (SOPs) 8.2 Supervise any required training for employees during shift operations 8.3 Ensure availability of reference materials 8.4 Implement communication and feedback mechanisms to and from employees

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret food safety, food labelling and other regulations affecting flour mills
Writing	Record flour milling operations on paper-based and electronic

Skill	Description
	media
Numeracy	Calculate water required to achieve target moisture content, extraction rates, protein loss for each grist, and milling gains/losses
Navigate the world of work	- Interpret and follow regulatory requirements and seek clarification or other assistance when required - Identify and describe own skills, knowledge and experience within context of job role - Seek advice and feedback on current work performance
Interact with others	- Liaise with other departments on flour product requirements - Identify training needs of staff, where required - Communicate production requirements and technical information to other employees - Use effective communication skills to allocate tasks and provide feedback to team members - Use appropriate vocabulary, including technical language directly relevant to role - Recognise personal strengths and challenges associated with interacting with others in the workplace
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality specifications across all flour milling operations in the workplace - Identify routine problems and implement standard solutions as required

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3003 Lead flour milling shift operations	FDFGR3003A Lead flour milling shift operations	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3003 Lead flour milling shift operations

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- interpreted production requirements and grain tests for desirable mill settings
- established shift operating environment, including required equipment, staffing and work organisation, and costing requirements
- monitored quality of shift operations, including identifying specifications for product to be produced, identifying performance indicators, supervising testing of product, monitoring performance and reporting non-conformances
- assisted employees with conduct and interpretation of grain and flour tests
- matched grain receipt, screening and storage processes to production requirements during shift
- prepared or supervised production of grist according to recipes
- set and managed milling and blending operations
- supervised dust control, HACCP and work health and safety procedures during shift operations
- identified equipment maintenance procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- differences in types of milling processes, including differences in milling of different grains, varieties and milling for flour or for semolina
- process and purpose of flour milling, including:
 - opening of grain to enable removal of endosperm
 - separation of bran

- grinding of endosperm to flour, including sifting of ground stock to remove oversize endosperm particles, flour, or any bran and endosperm that has not been ground
- kibbling
- middlings and semolina process
- methods used to establish the most economic grist for a particular flour, including the balancing of flour specification, grain availability and cost of grain available
- financial impacts of mill performance/settings
- principles of preventative maintenance, including failure mode effects analysis (FMEA)
- food safety, food labelling and other regulations affecting flour mills
- grain varieties and specifications
- flour types and specifications
- food labelling regulations relevant to flour products
- HACCP principles and procedures
- dust control procedures
- work health and safety standards and requirements
- environmental regulations
- feedback techniques
- enterprise budget operating procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to flour milling operations
 - break and reduction roll process and related equipment and services
 - conditioned grain suitable for the break and reduction roll process
 - sampling schedules, and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment manuals, including operating parameters
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3004 Control mill processes and performance

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to control flour and by-product production in a flour mill.

This unit applies to a shift miller who is required to set equipment in a flour mill to control the processes and performance across the mill to achieve maximum extraction and recipe compliance. The unit applies to all industrial flour mills, including semolina mills and including mills without purifiers.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain mill flow sheet	1.1 Identify all breaking, reduction and dressing stages in mill 1.2 Show destinations for all stock separations according to operating

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Identify all optional and ancillary equipment required to control flour and by-product production 1.4 Identify all bins, silos, chutes, conveyors and exhausts that control processes and performance across the mill
2. Prepare for flour and by-product production	2.1 Establish customer requirements for shift or production period 2.2 Follow recipe required to meet desired production quality and quantity targets 2.3 Check availability of required wheat stock 2.4 Determine if any changes to grist stock will be required and plan for changes to settings
3. Determine break system settings	3.1 Adjust break rolls for desired percentage release 3.2 Conduct visual inspection and test sieving where required to monitor release percentage 3.3 Monitor break roll passages to avoid saturation of later stages 3.4 Set bran finishers according to workplace procedures and to ensure optimum performance 3.5 Set plansifters for desired grading, including adjusting spaces between plansifters for varying grains and moisture levels 3.6 Monitor performance of break system to ensure system is free from semolina
4. Set settings for purifiers where fitted	4.1 Maintain and monitor sieve covers according to workplace procedures and to ensure optimum performance 4.2 Monitor feed rate to purifiers according to workplace procedures and to ensure optimum performance 4.3 Monitor horizontal and vertical movement of sieve covers 4.4 Set and monitor air pressure for each aspiration section 4.5 Select destinations for throughs and lifted bran and other particles 4.6 Ensure purifier stock is free from flour
5. Set settings for scratch or sizing system	5.1 Set scratch equipment or sizing rolls according to operator instructions 5.2 Monitor performance of scratch and sizing rolls

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
6. Set settings for reduction passages	6.1 Set each set of reduction rolls for desired flour and capacity of succeeding reduction passages 6.2 Monitor covers on sifters for effective dressing from each reduction roll 6.3 Monitor flake disrupters and impact detachers where fitted 6.4 Set and monitor reduction settings to achieve required starch damage 6.5 Specify collection conveyors and bins for each flour stream
7. Set settings for final production stages	7.1 Specify use of flour divides for blends 7.2 Monitor redressing equipment according to workplace procedures 7.3 Monitor weighing, infestation destroying, and metal removal equipment according to work health and safety and operating procedures 7.4 Send finished flour to packing or storage according to workplace requirements
8. Monitor mill equipment	8.1 Check flutes and rolls for wear and defects 8.2 Monitor temperature of reduction rolls and performance of water cooling if used 8.3 Check automatic roll adjustment and protection mechanisms are working correctly 8.4 Adjust mill settings when required for effect of breakdowns and urgent maintenance
9. Monitor mill performance	9.1 Ensure all grain and flour tests are carried out to required schedule and procedures 9.2 Adjust settings where required for variation in grain, grist and atmospheric conditions 9.3 Monitor milling and invisible loss per production period

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret mill flow diagrams - Interpret food safety, food labelling and other regulations affecting flour mills
Writing	Record flour milling equipment status on paper-based and electronic media
Numeracy	Estimate break roll percentages through visual examination, hand stratification and test sieving
Navigate the world of work	- Interpret and follow regulatory requirements and seek clarification or other assistance when required - Identify and describe own skills, knowledge and experience within context of job role - Seek advice and feedback on current work performance
Interact with others	- Communicate production requirements and technical information to other employees - Use effective communication skills to allocate tasks and provide feedback to team members - Use appropriate vocabulary, including technical language directly relevant to role - Recognise personal strengths and challenges associated with interacting with others in the workplace
Get the work done	- Perform contingency planning for equipment breakdown, including failure mode effects analysis - Adjust break rolls to take into account number of break stages, grist composition, specification of finished product - Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality specifications across flour milling operations in the workplace

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3004 Control mill processes and performance	FDFGR3004A Control mill processes and performance	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3004 Control mill processes and performance

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- interpreted mill flow diagrams and production requirements
- identified customer requirements
- determined correct settings for equipment
- set and monitored break and reduction system equipment
- achieved flour recipes through correct use of grist and mill settings
- monitored equipment settings and performance
- adjusted mill settings for breakdowns and other contingencies
- set all related processes for:
 - break
 - scratch
 - sizing
 - reduction and other milling
- supervised wheat conditioning
- ensured settings take into account the capability of equipment and the need to avoid imbalances, product build ups and chokes
- ensured all grain and flour tests are carried out to required schedule and procedures
- applied safe work practices and identified work health and safety hazards and controls.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- alternative and historical milling techniques, including:
 - stone grinding

- 'low' or one pass through grinding
- use of small manual or electric milling machines
- semolina process compared with traditional flour milling process
- conventions and techniques in drawing mill flow diagrams
- characteristics of different grist and their milling requirements
- purpose design and steps in the break process, including:
 - overall aim of removing bran from endosperm in large pieces while minimising bran powder and flour
 - roller design
 - flute design
 - roller speed
 - number of passages
 - destinations of product from each break roll
- purpose, design and principles of the purification process, including:
 - sieve design
 - role of sifting, shaking, gravity and aspiration (upward air)
 - screening decks
 - exhaust ports and chambers
 - collection of throughs
 - overtails
 - relationship of purification to later reduction stages
- scratch equipment and process to remove small pieces of bran and germ from endosperm after sizing or purification
- relationship of particle size to reduction roller efficiency
- reduction which grinds flour into required fineness while controlling damage to starch granules and minimising abrasion to any bran and germ particles present
- features and performance characteristics of milling equipment as specified in manufacturer reference material
- relationship between total dressing surface ratio to mill capacity
- calculation of break roll percentages
- techniques to avoid imbalances, product build ups and chokes
- mill balance requirements and techniques, including:
 - ensuring that stock does not return to immediate preceding passage or equipment
 - feed to first break at a constant rate
 - evenness of feed into rolls
 - maintenance of conveyor and air settings to achieve constant feed
- calculation of mill performance, including:
 - invisible loss rate
 - theoretical and actual milling loss rate.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to flour milling operations
 - break and reduction roll process and related equipment and services
 - conditioned grain suitable for the break and reduction roll process
 - sampling schedules and test procedures and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment manuals, including operating parameters
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3005 Conduct rice harvest receivals

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to coordinate receival, drying and storage procedures during the rice harvesting period.

The unit applies to individuals who work in the rice grain receivals sites who are responsible for receiving paddy rice for storage and preparation of rice seed. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan rice harvest receivals	1.1 Plan for equipment preparation in conjunction with harvest schedule 1.2 Assess labour requirements and make recommendations on labour

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Identify the requirements for licences and permits, and ensure they are met 1.4 Identify, select and fit personal protection equipment
2. Receive rice	2.1 Plan storage requirements to allow segregation by variety 2.2 Evaluate and recommend haulage resources 2.3 Identify strategies and resource requirements for drying grain 2.4 Instruct grain suppliers on procedures to deliver grain at maximum quality 2.5 Maintain work area according to workplace housekeeping standards
3. Monitor moisture content	3.1 Monitor grain for moisture content against specifications 3.2 Adjust receival operations to control moisture in stored grain according to procedures 3.3 Assess grain to ensure grain is dried to within required moisture level specifications 3.4 Record grain handling information according to workplace procedures
4. Implement harvest receival schedule	4.1 Manage operating hours to suit harvest resources 4.2 Coordinate equipment operation for maximum efficiency during harvest receivals 4.3 Schedule maintenance and servicing requirements to fit with the harvesting receival plan 4.4 Record harvest schedule information according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description

Reading	Reads and interprets plans, specifications, and other documentation from a variety of sources, and consolidates information to determine rice storage and preparation requirements
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice grain storage records
Numeracy	- Make calculations appropriate for measuring and estimating rice weights and volumes for storage - Performs mathematical calculations for testing and interpreting rice samples and results to determine action
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3005 Conduct rice harvest receivals	ZRGRPRH3A Conduct rice harvest receivals	Updated to meet Standards for Training Packages Minor changes to performance criteria	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3005 Conduct rice harvest receivals

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has conducted rice harvest receival for at least three rice grain varieties, including:

- accessed workplace information to identify rice receival requirements
- confirmed supply of necessary equipment and related attachments, materials and services
- identified, selected, fitted and used personal protective clothing and equipment
- followed workplace health and safety procedures
- confirmed supply of necessary equipment and services to carry out set-up operations
- monitored the rice harvest receival system and equipment operation to identify out-of-specification results or non-compliance
- took corrective action in response to out-of-specification results or non-compliance
- diagnosed common faults and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- monitored moisture content and taken action to address moisture issues
- maintained work area to meet housekeeping standards
- managed resources required for rice receival
- maintained workplace records.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic operating principles of the rice harvest receival system, equipment and related processes, including:
 - scheduling requirements
 - resource requirements
 - checking/regulating/adjusting work processes

- rice harvest haulage resources, including:
 - company or contractor haulers
 - combination of trucks and trailers
- handling requirements of rice, including:
 - drying and aeration requirements
 - effect of ambient conditions
 - humidity and moisture
- visual identification of short, medium and long grain rice varieties used within the organisation
- methods of measuring rice condition and controlling the handling and storage conditions
- common causes of variation in rice quality/handling/storage practice, and corrective actions required
- workplace health and safety hazards and controls
- procedures and responsibility for reporting performance information
- operation and monitoring of equipment and processes, including:
 - control panels and systems
 - shutdown procedures
 - cleaning procedures
 - cleaning requirements and status
 - cleaning records.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - harvest/receival schedule
 - rice harvest receival equipment
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - specifications, control points and processing parameters
 - equipment operating instructions and manuals
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - communication and recording systems and procedures

- cleaning procedures, records/clearance as required.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3006 Implement a paddy receival and grain cleaning process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to remove foreign materials and clean and prepare paddy rice for further processing.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the paddy receival and grain cleaning process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a paddy receival and	1.1 Select and fit personal safety protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
grain cleaning process	workplace safety procedures 1.2 Select and fit hygiene protection equipment according to workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on paddy receival and grain cleaning activity and performance requirements
2. Prepare the paddy receival and grain cleaning equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the paddy receival and grain cleaning process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the paddy receival and grain cleaning process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3006 Implement a paddy receival and grain cleaning process	ZRGRPPR2A Operate a paddy rice preparation process	Updated to meet Standards for Training Packages Change to coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3006 Implement a paddy receival and grain cleaning process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a paddy receival and grain cleaning process for at least three rice grain varieties, including:

- accessed and interpreted workplace information for paddy rice preparation requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- diagnosed common faults and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- took corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the process
- completed records according to workplace procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the paddy rice preparation process, including:
 - visual identification of short, medium and long grain rice varieties used within the organisation
 - related preparation requirements
 - process flow and the effect of paddy rice preparation process on the end product

- basic operating principles of equipment, including:
 - operational understanding of main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common impurities found in paddy rice
 - acceptable levels of foreign materials content in cleaned paddy rice
 - common causes of product variation, and corrective action
 - requirements of materials and effect of variation in raw materials on the paddy rice preparation process
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - typical equipment faults and related causes
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the production process, including
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - paddy rice cleaning and related equipment and services used on a commercial scale
 - paddy rice to be cleaned
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - production schedule
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment as required
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment as required.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3007 Implement a rice blending and cleaning process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to blend and clean different rice varieties to meet customer specifications in a rice milling process.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the blending and cleaning process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice blending and cleaning process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice blending and cleaning activity and performance requirements
2. Prepare the rice blending and cleaning equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice blending and cleaning process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the rice blending and cleaning process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

FBPGRA3007 Implement a rice blending and cleaning process	ZRGRPBC2A Operate a rice blending and cleaning process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3007 Implement a rice blending and cleaning process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice blending and cleaning process for at least three rice grain varieties, including:

- accessed and interpreted workplace information to identify blending and cleaning processing requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- took corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the blending and cleaning process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed records according to workplace procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the blending and cleaning process, including:
 - process flow and the effect of blending and cleaning process on the end product
 - varieties and standards of rice
- basic operating principles of equipment, including:

- bins
- bulkers
- tipping/running equipment
- opening slides
- sieves/screens
- conveyor belts and elevators
- weighers
- transfer equipment
- moisture meter
- process control equipment
- cleaning equipment
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation and corrective action
 - requirements of materials and effect of variation in raw materials and/or rice variety on the blending and cleaning preparation process
 - sampling and testing associated with process monitoring and control
 - the impact of moisture content in rice on rice processing
- faulty rice product, including
 - incorrect type
 - incorrect moisture content
 - chalky grains
 - foreign materials
 - incorrect colour
 - immature grain
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:

- typical equipment faults and related causes
- checking magnets
- recognition of signs and symptoms of faulty equipment
- early warning signs of potential problems
- requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the blending and cleaning process, including:
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial-sized rice blending and cleaning equipment and services
 - rice to be blended and cleaned
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule
 - specifications, control points and processing parameters
 - equipment operating instructions and manuals
 - sampling schedules and test procedures and equipment as required
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3008 Implement a rice colour sorting process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to operate an optical rice colour sorting process to remove impurities and substandard rice received from the whitening process.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the colour sorting process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice colour sorting process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice colour sorting activity and performance requirements
2. Prepare the rice colour sorting equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice colour sorting process	3.1 Start and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions 3.3 Identify variation in equipment operation, and report maintenance requirements according to workplace reporting procedures 3.4 Collect samples and test to ensure rice meets colour specifications 3.5 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.6 Ensure workplace meets housekeeping standards 3.7 Maintain records according to workplace requirements
4. Shut down the rice colour sorting process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3008 Implement a rice colour sorting process	ZRGRPCS2A Operate a rice colour sorting process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3008 Implement a rice colour sorting process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice colour sorting process for at least three rice grain varieties, including:

- accessed and interpreted workplace information for colour sorting process requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- taken corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the colour sorting process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice colour sorting process, including:
 - methods for determining the number of passes through the colour sorting process
 - process flow and the effect of rice colour sorting on the end product
 - visual identification of short, medium and long grain rice varieties used within the organisation

- basic operating principles of colour sorting equipment, including:
 - primary colour sorter
 - secondary colour sorter
- an operational understanding of main colour sorting equipment components:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear and problems
 - appropriate settings and/or related parameters for different impurities, and the importance of settings for glass
 - appropriate adjustments to maintain product specifications
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action
 - requirements of materials and the effect of variation in raw materials on colour sorting process
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters
- recognition and fault-finding for typical equipment faults and related problems, including:
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice colour sorting process, including:
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information

- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial rice colour sorters and related equipment and services
 - commercial quantity of rice to be sorted
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - production schedule
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3009 Implement a rice flour break process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to separate the bran and other components from the endosperm to produce flour using rice break and fine break equipment.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice flour break process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a flour break process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on flour break activity and performance requirements
2. Prepare the flour break equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the flour break process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the flour break process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3009 Implement a rice flour break process	ZRGRPF2A Operate a rice flour break process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3009 Implement a rice flour break process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice flour break process for at least three rice grain varieties, including:

- accessed workplace information to identify rice flour break requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and selected appropriate flour break settings and/or related parameters to achieve required outcomes, including:
 - flow rates
 - adjusting roller pressure
 - clearing chokes or jams
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- taken corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the colour sorting process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice flour break process, including:
 - the purpose of break rolls

- process flow and the effect of rice flour break process on the end product
- visual identification of short, medium and long grain rice varieties used within the organisation
- materials used in the break process, including:
 - large brokens
 - small brokens
 - different rice varieties
- by-products produced, including:
 - bran
 - pollard
 - screenings
- basic operating principles of equipment, including:
 - rice break equipment
 - break rolls (roller mills)
 - transfer equipment
 - ripple mill
 - pin mill
 - impact detacher
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action
- faulty rice product, including:
 - pollard
 - damaged rice
 - brokens
 - incorrect type
 - incorrect moisture content

- chalky grains
- foreign materials
- incorrect colour
- sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - typical equipment faults and related causes
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice flour break process, including:
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial rice flour break equipment and services
 - commercial qualities of rice raw materials
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule
 - specifications, control points and processing parameters

- equipment operating instructions and manuals
- sampling schedules and test procedures and equipment
- documentation and recording requirements and procedures
- cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3010 Implement a rice flour grading process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to operate and maintain the sieving machinery for a rice flour grading process.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice flour grading process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice flour grading process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice flour grading activity and performance requirements
2. Prepare the rice flour grading equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice flour grading process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the rice flour grading process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3010 Implement a rice flour grading process	ZRGRPFG2A Operate a rice flour grading process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3010 Implement a rice flour grading process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice flour grading process for at least three rice grain varieties, including:

- accessed and interpreted workplace information to identify rice flour grading processing requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- taken corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the rice flour grading process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed records according to workplace procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice flour grading process, including:
 - visual identification of short, medium and long grain varieties of rice grain and rice flour used within the organisation
 - process flow and the effect of rice flour grading on the end product

- flow of this process and the effect of rice flour grading process on the end product
- separation of the break stock (chop) into appropriate flows to the next break, purifiers and sizing rolls
- source of raw materials (from break process)
- basic operating principles of equipment, including:
 - plansifters and accessories
 - transfer equipment
 - compressors
 - aspirators
 - filtrators
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action
 - requirements of materials and effect of variation in raw materials and rice variety on the rice flour grading process
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - typical equipment faults and related causes
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice flour grading process, including:
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with the process, and related control measures

- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial milling rice flour grading equipment and services
 - commercial volumes of flour to be graded
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - production schedule
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3011 Implement a rice grading process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to sort and remove foreign grains and other matter from rice using scalping equipment.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice grading process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice grading process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice grading activity and performance requirements
2. Prepare the rice grading equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice grading process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the rice grading process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3011 Implement a rice grading process	ZRGRPRG2A Operate a rice grading process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3011 Implement a rice grading process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice grading process for at least three rice grain varieties, including:

- accessed and interpreted workplace information for rice grading processing requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- taken corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the rice grading process
- diagnosed common faults and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed records according to workplace procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice grading process, including:
 - visual identification of short, medium and long grain rice varieties used within the organisation, including recognition of double or single stress cracked rice
 - process flow and the effect of rice grading process on the end product
 - effect of grain heat on grading process

- basic operating principles of equipment, including:
 - balance bins
 - plansifters and accessories
 - length graders
 - width graders
 - destoners
 - transfer equipment
 - weighers
 - indent cylinders and adjustments
 - correct amount of weight on whiteners
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation and corrective action
 - requirements of materials and effect of variation in raw materials on the rice grading process
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - typical equipment faults and related causes
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice grading process, including:
 - inspecting
 - measuring
 - testing

- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial milling rice grading equipment and services
 - commercial volumes of rice to be graded
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - production schedule
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3012 Implement a rice hulling and separation process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to remove the husks and separate brown rice from paddy rice using hulling and separation equipment.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice hulling and separation process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a hulling and separation process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on hulling and separation activity and performance requirements
2. Prepare hulling and separation equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor hulling and separation process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down hulling and separation process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3012 Implement a rice hulling and separation process	ZRGRPHS2A Operate a hulling and separation process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3012 Implement a rice hulling and separation process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a hulling and separation process for at least three rice grain varieties, including:

- accessed and interpreted workplace information for hulling and separation requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted separation and hulling process equipment to achieve required outcomes, including:
 - monitored control points
 - conducted inspections
 - confirmed process remains within specification
 - conducted equipment changeover/replacements according to procedures
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- followed personal hygiene practices according to food safety procedures
- monitored the quality of process, and taken corrective action in response to out-of-specification results
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the hulling and separation process and the effect of hulling/shelling and separation process on the end product, including:
 - visual identification of short, medium and long grain rice varieties used within the organisation
 - process flow and the effect of hulling and separation process on the end product
- basic operating principles of equipment, including:
 - huller rollers and replacement/reversal
 - elevators
 - spouts
 - tilt paddy tables
- operational understanding and adjustments of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities, efficiencies and applications
 - purpose and location of sensors and related feedback instrumentation
 - knowledge of services required and action to take if services are not available
- basic operating principles of process control, including:
 - process control equipment
 - the relationship between control panels and systems
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - requirements of materials and effect of variation in raw materials on the hulling and separation process
 - common causes of variation, and corrective action required, including contamination and mixed rice
 - sampling and testing associated with process monitoring and control
 - quality indicators, including moisture
- equipment operating requirements, parameters and corrective action required where operation is outside specified operating parameters, including:
 - identification of typical equipment faults and related causes
 - recognition of signs and symptoms of blocked, faulty or worn equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
 - isolation, lock-out and tag-out procedures and responsibilities
 - routine maintenance procedures
- methods used to monitor the hulling and separation process, including:
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures

- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including:
 - waste/rework collection
 - manual handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - hulling equipment and services
 - tilt paddy tables for separating grain from paddy
 - product to be hulled and separated
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule
 - specifications, control points and processing parameters
 - equipment operating instructions and manuals
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3013 Implement a rice product manufacturing process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare ingredients and produce rice food products using a manufacturing process.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice product manufacturing process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice product manufacturing process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to workplace

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice product manufacturing activity and performance requirements
2. Prepare the rice product manufacturing equipment for operation	2.1 Ensure raw materials available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice product manufacturing process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice product meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the rice product manufacturing process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3013 Implement a rice product manufacturing process	ZRGRPPM2A Operate a rice product manufacturing process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3013 Implement a rice product manufacturing process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice product manufacturing process for at least three rice products, including:

- accessed and interpreted workplace information to identify rice product manufacturing processing requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- taken corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the rice product manufacturing process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice product manufacturing process, including:
 - process flow and the effect of rice product manufacturing process on the end product
 - product handling and storage requirements

- additives and raw materials/ingredients combined to create a finished product
- materials used in the process, including:
 - rice
 - ingredients
 - additives
- basic operating principles of equipment, including:
 - ingredient mixers
 - product manufacturing equipment
 - product packaging
 - weigher
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action
 - requirements of materials and effect of variation in ingredients on the rice product manufacturing process
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - typical equipment faults and related causes
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice product manufacturing process, including:
 - inspecting
 - measuring
 - testing

- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial ingredient mixers and rice product manufacturing equipment and services
 - ingredients required for the product manufacturing process
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - production schedule
 - recipes, specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3014 Implement a rice seed preparation and storage system

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to manage preparation and storage of rice seeds for planting.

The unit applies to individuals who are production workers in the rice grain receivals sites and are responsible for receiving paddy rice for preparation and storage for agricultural use. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Produce high quality seed	1.1 Label seed clearly and accurately to company requirements 1.2 Apply improvement measures to agricultural seed stock to be stored
2. Determine seed requirements	2.1 Calculate seed requirements for the area to be sown 2.2 Check seed varieties against available market data and details, and report according to workplace procedures
3. Evaluate, grade and test seed stocks	3.1 Ensure seed is graded to required size 3.2 Collect seed samples, package and send for testing according to workplace procedures 3.3 Maintain workplace records according to workplace procedures
4. Collect and deliver seed	4.1 Estimate delivery or supply terms, and apply when collecting or delivering seed 4.2 Ensure seed sold or purchased conforms to legislation and regulations 4.3 Arrange appropriate delivery resources according to workplace procedures 4.4 Complete sales and purchase documentation according to workplace procedures
5. Store seed safely	5.1 Select and prepare seed storage within food safety requirements 5.2 Organise seed handling and storage equipment and related attachments and materials 5.3 Ensure seed is stored safely under conditions that maintain quality and viability according to workplace health and safety procedures 5.4 Monitor seed systematically for pest status, and apply control measures according to workplace procedures 5.5 Label seed according to workplace procedures 5.6 Clean and maintain seed storage and work area according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets plans, specifications, and other documentation from a variety of sources, and consolidates information to determine rice storage and preparation requirements
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice grain storage records
Numeracy	- Makes calculations appropriate for measuring and estimating rice weights and volumes for seed sowing and storage - Performs mathematical calculations for testing and interpreting rice samples and results to determine action
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures, industry standards and legislative requirements - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3014 Implement a rice seed preparation	ZRGRPSP3A Operate a rice seed preparation and	Updated to meet Standards for Training Packages	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
and storage system	storage system	Changes to title, elements and performance criteria	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3014 Implement a rice seed preparation and storage system

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice seed preparation and storage system for at least three rice grain varieties, including:

- accessed and interpreted workplace information to identify seed preparation and storage requirements
- confirmed availability of necessary seed handling and storage equipment and related attachments, materials and services
- followed workplace health and safety procedures
- followed workplace food safety procedures
- monitored the seed preparation and storage process and equipment operation to identify out-of-specification results or non-compliance, including:
 - maintaining seed segregation
 - collecting seed samples
 - recording information
 - testing seeds
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- taken corrective action in response to out-of-specification results or non-compliance
- calculated seed requirements for planting
- maintained work area to meet housekeeping standards
- maintained workplace records.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic operating principles of the seed preparation and storage process

- seed varieties and related treatments, including:
 - cleaning
 - handling
 - storage requirements
- rice seed varieties, market demand and availability
- methods to identify and separate weed seeds and contaminants from seed stock
- optimal storage/germination conditions and how these can be achieved
- seed pests and related control measures
- sources of purchased seed
- sampling and testing procedures
- methods used to calculate seed requirements
- methods of measuring rice condition and controlling the handling and storage conditions
- common causes of variation in rice quality/handling/storage practice, and corrective actions required
- significance and methods of monitoring control points within the seed storage and preparation process
- operation and monitoring of equipment and processes, including control panels and systems
- workplace health and safety hazards and controls
- procedures and responsibility for reporting performance information
- seed preparation and storage process and equipment, including:
 - taking samples and conducting tests
 - monitoring conditions, including, moisture, humidity and temperature of storage facilities
 - effectiveness of measures to prevent pest infestation
- workplace procedures, regulatory and licensing requirements for seed preparation and storage
- legislation relevant to this industry, including:
 - food standards code, including, labelling, weights and measures, and food safety
 - agricultural seed
 - environmental management
 - work health and safety
 - anti-discrimination and equal opportunity
- seed preparation and storage equipment, including:
 - transfer equipment
 - weighers
 - storage bins
- seed improvement measures, including:
 - roguing of off-types and undesirable weeds
 - grading out weed seeds, small grains and other impurities
- sales, packaging and transport of rice for agricultural purposes, including:

- sales and delivery procedures and documentation
- packaging methods
- transport methods and arrangements
- seed testing, including:
 - purity testing
 - grain size
 - viability
- cleaning requirements and cleaning records.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - seed control system
 - seed preparation, handling and storage equipment
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - communication and recording systems and procedures
 - cleaning procedures, records/clearance
 - production schedule
 - routine preventative maintenance schedule as required.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3015 Implement a rice whitening process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to take brown rice and convert it to white rice through a friction abrasive whitening process.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice whitening process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice whitening process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice whitening activity and performance requirements
2. Prepare the rice whitening equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice whitening process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace requirements
4. Shut down the rice whitening process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3015 Implement a rice whitening process	ZRGRPRW2A Operate a rice whitening process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3015 Implement a rice whitening process

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice whitening process for at least three rice grain varieties, including:

- accessed and interpreted workplace information for rice whitening process requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- selected, fitted and used personal protective equipment and followed workplace health and safety procedures
- taken corrective action and adjustments in response to out-of-specification results
- monitored supply and flow of materials to and from the rice whitening process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice whitening process, including:

- visual identification of short, medium and long grain rice varieties used within the organisation
- process flow and the effect of rice whitening process on the end product
- degree of whitening required and relation to number of passes
- basic operating principles of equipment, including:
 - balance bins
 - abrasive whitener
 - friction whitener
 - vertical or horizontal whiteners/water polishers
 - testing equipment
- an operational understanding of main equipment components, including:
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear, including identifying holes in whitening screens, identifying worn scrolls, and making appropriate adjustments
 - appropriate settings and/or related parameters, including whitener weights adjustments to meet specifications
 - isolation or lock-out procedures
 - confirming that equipment is clean and correctly configured for processing requirements
 - confirming that sensors and controls are correctly positioned
 - scheduled maintenance requirements
 - product/process changeover procedures and responsibilities
- quality characteristics, including:
 - common causes of product variation, and corrective action, including moisture levels
 - requirements of materials and effect of variation in raw materials on the rice whitening preparation process
 - sampling and testing associated with process monitoring and control
 - equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - out-of-specifications troubleshooting procedures
 - typical equipment faults and related causes, including recognition of signs and symptoms of faulty equipment and early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine weekly shutdowns, product changeover, and procedures to follow in the event of a power outage
 - requirements of different start-up procedures following shutdown
- methods used to monitor the rice whitening process, including:

- inspecting
- measuring
- testing, including moisture, non-metallic foreign materials, metallic foreign materials
- contamination/food safety risks associated with the process, and related control measures
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - industrial paddy grain cleaning machine that has the capacity to process at least four tonnes per hour
 - paddy destoner that has the capacity to process at least four tonnes per hour
 - rice to be whitened
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment operating instructions and manuals
 - production schedule
 - customer specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment as required
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA3016 Implement a rice flour blending process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to blend rice flour to specification using rice flour blending equipment.

The unit applies to individuals who are production workers in the rice processing environment and are responsible for the rice flour blending process. They work under minimal supervision and take responsibility for their own work and that of others in their team.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for safe work in a rice flour blending process	1.1 Select and fit personal safety protection equipment according to workplace safety procedures 1.2 Select and fit hygiene protection equipment according to

Elements	Performance criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace food safety hygiene procedures 1.3 Perform personal hygiene cleaning procedures 1.4 Receive and interpret instructions on rice flour blending activity and performance requirements
2. Prepare the rice flour blending equipment for operation	2.1 Ensure raw materials are available to meet operating requirements 2.2 Identify and confirm the status of cleaning and maintenance requirements 2.3 Fit and adjust machine components and related attachments according to operating requirements 2.4 Enter processing/operating parameters to meet safety and production specifications 2.5 Check, adjust and conduct routine maintenance on equipment to ensure required performance 2.6 Conduct pre-start checks according to workplace instructions
3. Operate and monitor the rice flour blending process	3.1 Start up and operate process according to workplace procedures 3.2 Monitor equipment to identify variation in operating conditions, and adjust according to product specifications 3.3 Identify variation in equipment operation, and repair or report maintenance requirements according to workplace reporting procedures 3.4 Implement required safety procedures 3.5 Collect samples and test to ensure rice meets specification 3.6 Identify, rectify or report out-of-specification product/process to maintain process within specification 3.7 Ensure workplace meets housekeeping standards 3.8 Maintain records according to workplace instructions
4. Shut down the rice flour blending process	4.1 Identify appropriate shutdown procedure 4.2 Shut down the process safely according to workplace procedures 4.3 Identify maintenance requirements, and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skills	Description
Reading	Reads and interprets instructions, operating procedures, specifications, and other documentation from a variety of sources, and consolidates information to determine rice production actions and activity
Writing	Accurately records and completes organisational documentation using clear language, correct spelling, grammar and terminology when reporting and maintaining rice processing records
Numeracy	- Interprets and manipulates numerical information for volumes, weights and measures - Performs mathematical calculations to check, interpret and confirm results of system tests
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	- Takes full responsibility for following policies, procedures and industry standards - Identifies and acts on issues that contravene relevant policies, procedures and legal requirements
Interact with others	Cooperates with others and contributes to work practices where joint outcomes are expected and deadlines are to be met
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and workload for efficiency and effective outcomes - Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more complex and non-routine situations - Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Uses the main features and functions of digital tools to complete work tasks and access information

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3016 Implement a rice flour blending process	ZRGRPRB2A Operate a rice flour blending process	Updated to meet Standards for Training Packages Change of coding to reflect revised AQF level Changes to the title, elements and performance criteria	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA3016 Implement a rice flour blending process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has implemented a rice flour blending process for at least three rice grain varieties, including:

- accessed and interpreted workplace information to identify rice flour blending requirements
- confirmed supply of necessary materials and services
- conducted pre-start checks, started, operated, monitored and adjusted process equipment to achieve required outcomes
- stored blended product according to food health and safety requirements
- selected, fitted and used personal protective equipment
- followed workplace health and safety procedures
- monitored control points and conducted inspections to confirm process remains within specification
- taken corrective action in response to out-of-specification results
- monitored supply and flow of materials to and from the rice flour blending process
- diagnosed common faults, and rectified or reported equipment failure within level of responsibility and according to workplace procedures
- completed workplace records according to procedures
- maintained work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the rice flour blending process, including:

- visual identification of short, medium and long grain varieties of rice and rice flour used within the organisation
- process flow and the effect of rice flour blending process on the end product
- raw materials used in blending, including rices, starch and gel
- basic operating principles of equipment, including:
 - an operational understanding of main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
 - inspection of equipment condition to identify any signs of wear
 - appropriate settings and/or related parameters
 - isolation or lock-out procedures
 - configuring processing requirements
 - confirming that sensors and controls are correctly positioned
 - confirming that scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
 - product/process changeover procedures and responsibilities
- quality characteristics and requirements of rice flour and ingredients, including:
 - common causes of product variation, and corrective action
 - sampling and testing associated with process monitoring and control
- equipment operating requirements, parameters and corrective action required where operation is outside specified parameters, including:
 - typical equipment faults and related causes, including recognition of signs and symptoms of faulty equipment, and early warning signs of potential problems
 - requirements of different shutdowns, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- methods used to monitor the rice flour blending, including:
 - inspecting
 - measuring
 - testing
- contamination/food safety risks associated with rice flour blending and related control measures
- rice flour blending equipment, including:
 - ribbon blenders
 - sieves
 - weighing equipment
 - mechanical/pneumatic raw materials transfer equipment
- cleaning and sanitation procedures
- work health and safety hazards and controls, including awareness of the limitations of protective clothing and equipment relevant to the work process

- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an industrial rice processing plant or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - commercial rice flour blending equipment and services
 - commercial volume of rice flour to be blended
 - cleaning materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - equipment operating instructions and manuals
 - production schedule
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA4001 Control power and automation for milling processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to match milling requirements to available services and equipment.

The unit applies to millers who are required to set and control milling equipment in industrial flour mills, including semolina mills and mills without purifiers. It includes development of strategies for effective use of power and automation, and directing programmed and other maintenance in order to ensure that milling performance is maintained.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish range of utilities and services	1.1 Identify distributed services used in mill 1.2 Ensure schematics showing location and distribution of services

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
used by mill	are available and understood by key personnel 1.3 Categorise services as critical to mill operation or ancillary according to workplace procedures 1.4 Develop contingency strategies in the event of utilities and services requiring maintenance or repair
2. Review mill electric power system for start-up and power demand management	2.1 Identify mains supply terminal, input voltage and electricity supplier 2.2 Identify mill transformers and distribution to sub-mains 2.3 Identify back-up generation and supply system, including automatic and manual operation conditions 2.4 Identify location of mill equipment and areas supplied by each sub-main and switchboard 2.5 Recognise key features and requirements of installed electrical safety systems, including lock off and isolation switches 2.6 Obtain maximum demand and diversity factor (power factor correction) and identify implications for mill operations 2.7 Establish motor control and start-up procedures according to manufacturer, engineer and supply authority procedures
3. Establish scope of hydrocarbon fuel use by mill	3.1 Identify capacity and fuel use of any on-site boilers 3.2 Locate emergency generators and their fuel source 3.3 Identify other fuel-powered equipment and processes 3.4 Locate location of fuel reservoirs/tanks and review against mill strategy for the prevention of dust explosions
4. Establish type and location of mill controls	4.1 Identify mill operations and equipment controlled automatically 4.2 Identify mill operations and equipment controlled through central process control stations/terminals 4.3 Identify mill operations and equipment controlled manually 4.4 Determine back-up strategies for mill control in the event of failure of control equipment
5. Control pneumatic conveying system	5.1 Determine processes where negative or positive pressure is required 5.2 Monitor air speed and volume requirements for conveying tasks

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.3 Select air speed and volume appropriate for exhausts 5.4 Balance negative pressure systems according to mill operation procedures 5.5 Monitor for abnormal increases in blow-line pressure 5.6 Determine cleaning intervals for dust collectors
6. Control wheat damping and conditioning	6.1 Monitor adequacy of water supply according to mill operation procedures 6.2 Determine if feed forward or feedback system is used 6.3 Supervise moisture testing of wheat according to workplace procedures 6.4 Set damping system controls for desired moisture level taking into account feed rate and lying-in time
7. Establish strategies and practices for efficient use of power and automation	7.1 Maximise throughput to mill capacity where possible 7.2 Ensure manufacturer maintenance and lubrication schedules are followed 7.3 Ensure standard operating procedures (SOPs) for controls and workstations are developed and up to date

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Identify maximum power demand for mill - Identify typical range of power demand for mill, taking into account scope of equipment and average production requirements
Navigate the world of work	- Challenge and develop own management style and innovative practices - Monitor adherence to legal and regulatory standards and responsibilities for self and others - Consider own role in terms of contribution to broader goals of the work environment, and adapt and renegotiate role and

Skill	Description
	responsibilities when this has the potential to increase effectiveness
Interact with others	• Use appropriate language and communication skills to facilitate discussions • Provide information about innovative practices, processes and products • Clarify the purpose and possible actions to be taken as a result of work-related communications
Get the work done	• Identify current innovative practice and organisational trends • Use a computer, keyboard and software to collect and file research data • Source, collect and organise a range of data about performance against targets • Identify maintenance requirements and develop schedules

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA4001 Control power and automation for milling processes	FDFGR4001A Control power and automation for milling processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA4001 Control power and automation for milling processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- interpreted schematics and identified range of utilities used by mill
- determined importance of services to mill operations
- identified key features and requirements of installed electrical safety systems
- matched milling requirements to available services and equipment, including electricity, gas and other fuels, steam generation, hydraulics and pneumatics
- used computerised and other control equipment to achieve desired milling outcomes
- determined fuel sources and power demand patterns for mill operations
- assessed fuel supply capacity
- determined control equipment and control options for mill
- established risk management and contingency strategies for mill power and automation
- integrated equipment maintenance and lubrication strategies with production requirements
- interpreted manuals, other technical information, diagrams and drawings
- applied safe work practices and identified work health and safety hazards and controls.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- types of electric motors and their advantages and disadvantages
- function and operational requirements of power system components, including:
 - mains supply terminal
 - mill transformers
 - back-up generation and supply system
 - electrical safety systems

- motor control and motor protection strategies
- demand and diversity factors
- fuel sources for mill uses, including:
 - on-site boilers
 - emergency generators
 - fuel powered equipment
- mechanical power transmission types and principles, including:
 - direct drives
 - belt drives
 - chain drives
 - gears
- factors influencing the velocity of particles in free air and in positive and negative air streams
- strategy for the prevention of dust explosions
- design principles used in exhaust systems for fans, ductwork and dust collectors
- advantages and disadvantages of axial flow, propeller and centrifugal fans
- advantages and disadvantages of forward, backward and radial bladed rotors
- types of mill controls and back-up strategies
- purpose and function of instrumentation, including:
 - proximity switches
 - position sensors
 - transducers
 - tachometers
 - flow meters
 - weighers
 - load cells
 - bin level indicators
 - pressure switches
 - programmable logic controllers (PLCs), system control and data acquisition (SCADA) systems, and other programmable instrumentation and systems
- mill equipment and its location and function
- maximum power demand for mill
- typical range of power demand for mill, taking into account scope of equipment and average production requirements.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:

- personal protective equipment relevant to flour milling operations
- sampling schedules and test procedures and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment manuals including operating parameters
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA4002 Supervise testing processes for wheat and flour

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to establish and supervise specific quality and testing processes for wheat and flour in a flour mill to ensure compliance with regulatory and commercial requirements.

The unit applies to individuals who set tests to be undertaken, establish acceptable limits and maintain accuracy in the mill testing regime. The emphasis in this unit is on the grain and flour specific quality and testing processes used in flour milling.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify specification for mill products and performance	1.1 Identify customer specification according to customer order 1.2 Review range and availability of suitable grain to meet

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	performance requirements 1.3 Set target range for grain and flour tests to achieve customer specification, consistency and maximum yield 1.4 Identify mill critical control points according to operating procedures 1.5 Identify regulatory requirements relevant to mill and mill products including safe work practices, food safety and environmental requirements
2. Establish sampling procedures and tests for grain	2.1 Determine tests and sampling procedures for received grain 2.2 Determine tests and sampling procedures for grists 2.3 Determine tests and sampling procedures for grain conditioning
3. Establish sampling procedures and tests for flour	3.1 Determine flour tests to be undertaken at each reduction stage 3.2 Determine number of samples to be taken to ensure representative results are achieved 3.3 Determine reference tests required for milling 3.4 Establish procedures for storage and labelling of samples according to work health and safety and environmental requirements
4. Establish statistical process control procedures for mill	4.1 Establish procedures for recording test results and monitoring period 4.2 Establish normal distribution standard deviation targets for each test 4.3 Monitor standard deviations for out of control results 4.4 Review results against reference tests 4.5 Determine root cause of out of control results
5. Establish procedures for test equipment maintenance and accuracy	5.1 Establish maintenance schedules for test equipment in conjunction with suppliers and maintenance staff 5.2 Identify schedule and staff for calibration of test equipment 5.3 Ensure written procedures for each test identify actions to be followed in the event of actual or suspected equipment malfunction according to workplace practices 5.4 Arrange for testing of control samples at commencement of each shift or run 5.5 Record test results and establish monitoring procedures to identify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	operator or equipment test result variations not related to variation in wheat or flour 5.6 Arrange for operator training or equipment variation as appropriate according to workplace needs

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret maintenance schedule and procedures for test equipment - Interpret manuals, diagrams, drawings and other technical information
Writing	- Establish maintenance schedules for test equipment - Compile reports to disseminate information about equipment and milling performance to a range of audiences
Numeracy	- Apply basic statistical skills sufficient to calculate averages, means and population and sample standard deviations from given data - Determine calibration procedures and schedule for test equipment
Navigate the world of work	- Challenge and develop own management style and innovative practices - Monitor adherence to legal and regulatory standards and responsibilities for self and others - Consider own role in terms of contribution to broader goals of the work environment and adapt and renegotiate role and responsibilities when this has the potential to increase effectiveness
Interact with others	- Identify training for operators, where required - Completing workplace documentation use appropriate language and communication skills to facilitate discussions - Provide information about innovative practices, processes and products - Clarify the purpose and possible actions to be taken as a result of work related communications

Skill	Description
Get the work done	• Supervise wheat and flour related tests including tests for moisture, contamination/purity, protein level , protein quality, ash content, colour, starch proportion, gluten elasticity and extensibility • Identify current innovative practice and organisational trends • Use a computer, keyboard and software to collect and file research data • Source, collect and organise a range of data about wheat and flour quality

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA4002 Supervise testing processes for wheat and flour	FDFGR4002A Supervise testing processes for wheat and flour	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA4002 Supervise testing processes for wheat and flour

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- identified and interpreted customer requirements
- identified regulatory requirements for mill operation
- identified mill critical control points
- established sampling procedures and tests for grain
- determined sampling procedures and rates for tests
- established procedures for test equipment maintenance and accuracy
- established procedures for storage and labelling of samples
- integrated testing regime with HACCP system
- maintained integrity of mill testing regime through use of control and reference tests and appropriate calibration and maintenance of test equipment
- applied safe work practices and identified work health and safety hazards and controls.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- effect of reduction and break stages on flour characteristics, including:
 - protein level
 - protein quality
 - ash content
 - colour
 - starch proportion
 - dough rheology
- test and test procedures appropriate to grain, including:

- sample appearance and smell
- sieving for sample purity
- near infrared test (NIR) and other tests for moisture, protein content, colour and grain hardness
- difference between 'as is' and 'dry weight' and moisture corrected moisture results and conversion of other parameters
- gluten washing test for protein quality
- Hagberg Falling Number test, including conversion of results to Perten Liquefaction Numbers
- Kern chondrometer test and other specific weight tests
- tests and test procedures related to flour, including:
 - NIR tests for flour moisture, protein content, colour, water absorption and ash content
 - colour testing using Kent-Jones and Martin flour colour grader
 - Pekar test
 - laboratory sieve tests
 - Brabender Extensograph and Farinograph test for dough stretching
 - viscosity tests
 - starch damage tests
 - Chittick test for carbon dioxide release
 - baking tests
- reference tests used for calibration, including:
 - oven test for moisture
 - Zeleny test for protein quality
 - Single Kernel Characterisation System (SKCS) test
 - Stenvert test for hardness
 - electrophoresis test for variety
 - image analysis for particle size and colour
 - muffle furnace test for ash content
 - fibre tests
- expected extraction rate for different stages of the milling process
- Australian grain characteristics relevant to milling, including:
 - variety
 - wheat segregations, including soft, Australian Premium White (APW), Hard and Prime Hard (PH)
 - other Australian grain segregations
- typical composition of bread, biscuit and cake-making flours, including moisture, sugar, starch, protein, fibre and mineral matter
- flour characteristics giving rise to faults in bread, pasta or other flour based products, including:
 - incorrect flour strength
 - incorrect alpha-amylase activity

- incorrect amount of damaged starch
- bran contamination
- incorrect improver dosage
- heat damaged wheat
- tainted flour
- microbiology tests for grain and flour
- tests used in manufacture of by-products.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to flour milling operations
 - sampling schedules and test procedures and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment manuals including operating parameters
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA4003 Manage mill logistics and support services

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to manage support and logistics services to ensure safe and efficient operation of a flour mill and compliance with regulatory and commercial requirements.

The unit applies to individuals who establish and supervise the handling, storage, despatch and distribution of materials, including grain, flour and by-products. It also covers supervision of hygiene, work health and safety, pest control and security procedures.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and environmental regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Review mill plan and flow diagram to ensure all logistics and support	1.1 Ensure incorporation of grain and other materials receiving locations in mill plan 1.2 Ensure incorporation of all grain, flour and by-product storage

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
services are correctly identified	facilities in mill plan 1.3 Review mill flow diagram for inclusion of all break and reduction system equipment and intermediate storage facilities 1.4 Ensure incorporation of all administration, maintenance, utilities and storage areas in mill plan 1.5 Identify directly milled and blended flour products in product flow diagrams and relate to storage and despatch facilities
2. Support product flow through mill	2.1 Review facilities and set operating procedures for grain receipt according to mill requirements 2.2 Ensure operators have required training and test materials for testing grain 2.3 Ensure storage availability for received grain, including any divisions 2.4 Confirm intermediate storage requirements based on forward production schedule 2.5 Establish product handling, storage and despatch procedures for just-in-time customers according to safe work practices 2.6 Establish product handling, storage and despatch procedures for daily, weekly or other regular deliveries 2.7 Identify any non-standard storage and despatch requirements 2.8 Establish and supervise inspection and cleaning regime for bins and silos 2.9 Establish and supervise temperature and moisture testing for storage bins and silos
3. Establish mill stock control system	3.1 Integrate warehouse control and information requirements with mill management and control system according to workplace procedures 3.2 Ensure customer orders are passed as soon as possible after receipt to production, storage, and transport departments 3.3 Establish bin stock measuring frequency and method to meet mill stock control requirements 3.4 Set and monitor weighbridge operation and recording procedures for all bulk inward and outward grain and mill products 3.5 Identify locations for automatic and manual recording of internal product transfers

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	3.6 Establish authorisation and access procedures for use of additives and adjuncts to meet mill stock control requirements
4. Supervise blending of flours to meet orders	4.1 Supervise internal transfer of flour to holding bins 4.2 Determine if volumetric, on-line or batch blending is to be used 4.3 Determine formula for required blend, including any required additives and adjuncts 4.4 Specify flours to be used to most economically achieve required formula according to flour blending requirements 4.5 Supervise blending operation, including data entry into batch or process control computer 4.6 Supervise transfer of blended flour to packing, despatch or storage
5. Supervise product despatch	5.1 Set and monitor 'give away' margin above minimum weight in packed flour 5.2 Supervise operation of bag and sack packing, and closing equipment 5.3 Determine, where required, if enterprise or contract vehicles are to be used 5.4 Oversee bag, sack and bulk flour despatch as appropriate according to workplace practices 5.5 Supervise packing and despatch of by-products, including palletisation of wheat-feed according to workplace practices
6. Manage work health and safety, mill safety, security and regulatory procedures for mill or area of responsibility	6.1 Establish or review perimeter security according to mill safety standards and security regulatory procedures 6.2 Confirm site access control point for all vehicle and pedestrian traffic 6.3 Review adequacy of truck holding and turnaround facilities 6.4 Establish or review site work health and safety plan and procedures 6.5 Ensure personal protective equipment, pedestrian walkways, and other pedestrian safety procedures are known and followed 6.6 Review fire protection plan and fire protection facilities, including location and type of extinguishers, suppression systems and alarms 6.7 Review visitor reception, registration and escort protocols for visitor access to non-administration areas

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	6.8 Establish compliance procedures for environmental, food safety and other regulatory requirements
7. Review mill dust control procedures	7.1 Review equipment and storage cleaning schedule and procedures for dust control effectiveness 7.2 Arrange regular inspections for potential ignition sources to meet safety standards 7.3 Review current dust control and dust explosion relief equipment and arrange for any required maintenance or additional dust control/dust explosion relief equipment according to manufacturers' specifications 7.4 Establish training in dust control procedures for all employees and contractors
8. Manage pest control procedures	8.1 Review site pest control plan to meet production and food safety requirements 8.2 Ensure all employees are trained to identify signs of insect, rodent and bird infestation 8.3 Establish inspection, sampling and testing regime for all equipment, storage areas and all inward and outward goods 8.4 Determine cause and type of infestations 8.5 Specify appropriate control measures for insect, rodent and bird infestation 8.6 Supervise protection of employees, community and product during treatments 8.7 Ensure compliance with regulations and environmental guidelines 8.8 Establish pest reporting and treatment recording procedures
9. Manage contractors for mill or area of responsibility	9.1 Establish and maintain schedule of contractors and their capabilities for services not performed in-house 9.2 Confirm procedures and delegations for engaging contractors 9.3 Develop site access register for contractors according to workplace requirements 9.4 Ensure contractors are briefed on all mill regulatory and commercial requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret mill plan and customer orders - Interpret manuals, diagrams, drawings and other technical information
Writing	- Record despatch and distribution information - Compile reports to disseminate information about storage and despatch to a range of audiences
Numeracy	- Calculate grain holding capacity, including in terms of days of production - Specify grain divisions on receipt to suit later blending requirements
Navigate the world of work	- Challenge and develop own management style and innovative practices - Monitor adherence to legal and regulatory standards and responsibilities for self and others - Consider own role in terms of contribution to broader goals of the work environment and adapt and renegotiate role and responsibilities when this has the potential to increase effectiveness
Interact with others	- Use appropriate language and communication skills to facilitate discussions - Provide information about innovative practices, processes and products - Clarify the purpose and possible actions to be taken as a result of work-related communications
Get the work done	- Schedule flour blending to suit customer requirements and transport logistics - Assess equipment and storage areas for dust control risks - Identify current innovative practice and organisational trends - Use a computer, keyboard and software to collect and file research data - Source, collect and organise a range of data about performance against targets

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA4003 Manage mill logistics and support services	FDFGR4003A Manage mill logistics and support services	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA4003 Manage mill logistics and support services

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- determined mill requirements for logistics and services, including:
 - stock control
 - transport and storage
 - blending
 - packing and despatch
 - security
 - pest control
- analysed flow of operations
- assessed requirements and capacity to support each stage of production
- assessed operator training for product testing
- specified grain divisions on receipt to suit later blending requirements
- scheduled flour blending to suit customer requirements and transport logistics
- assessed equipment and storage areas for dust control risks
- related rate of production to storage capacity
- identified requirements of mill customers and determined if orders are to be directly filled or met out of storage
- identified non-standard storage and despatch requirements
- supervised blending procedures to ensure customer requirements are met
- assessed risks and hazards in the workplace
- evaluated and established processes and procedures
- supervised despatch procedures
- ensured compliance with regulations and environmental guidelines
- established pest reporting and treatment recording procedures
- managed pest and dust control techniques in a mill

- accessed and used mill control system
- established procedures for on-site access for contractors.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- methods of storing and handling grain, flour, bran and by-products
- temperature and moisture-testing techniques for grain storage bins and silos
- dust control techniques
- dust explosion relief systems and equipment
- fire warning and control techniques
- flour blending techniques and equipment
- flour milling process, including purpose of the break and reduction systems
- advantages and disadvantages of volumetric, batch and on-line flour blending techniques
- usage requirements and formulas for additives and adjuncts
- types of warehouse control and information systems
- equipment used in flour blending, including:
 - weighers
 - mixers and homogenisers
 - pneumatic and mechanical feeders and conveyors
 - magnets, sifters and exhausts
- identification characteristics for pest insects, rodents and birds
- signs of insect and rodent infestation
- strategies to eliminate or reduce pests
- optimum treatments for insect, rodent and bird infestations
- work health and safety hazards and controls
- safe procedures for handling, using and storing pesticides and dangerous goods, identifying identification of information provided on labels and, where required, handling of gas cylinders
- typical risk management and contingency planning techniques for a flour mill.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to flour milling operations
 - customer orders
 - grain, flour and by-products and required storage facilities
 - cleaning procedures, materials and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - equipment manuals including operating parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPGRA4004 Establish and supervise dust control procedures in a grain processing enterprise

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to establish and supervise dust control procedures in a grain milling enterprise. It includes procedures for the identification of risk factors, establishment of preventative and hygiene measures, use of explosion relief and fire suppression systems, and arranging training for employees.

The unit applies to individuals who manage and supervise in grain-related enterprises, including flour and stockfeed mills and grain storage facilities who have responsibility for the development and detailed implementation of dust control and dust explosion prevention strategies.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Grain processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor dust explosion risk factors	1.1 Establish and monitor procedures for detecting potential explosive atmosphere

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Set procedures for reporting visible dust leaks 1.3 Confirm and enforce no smoking policy 1.4 Establish and monitor reporting regime for potential ignition sources 1.5 Establish and supervise manual and automatic temperature, smoke and moisture monitoring for all grain, flour, feed and other by-product storage 1.6 Establish and confirm regulation of systems to minimise fungal and insect infestation caused by temperature increases
2. Establish dust control procedures	2.1 Install and monitor dust aspiration or suction ventilation systems according to systems' specifications 2.2 Establish dust-checking procedures for all confined spaces 2.3 Establish monitoring procedures for dust collector performance and output 2.4 Establish procedures for resealing all dust leaks 2.5 Undertake random and periodical checks on performance of dust control procedures 2.6 Assess and approve any variation in cleaning and hygiene procedures 2.7 Minimise storage of combustible materials in mill 2.8 Establish minimum dust levels required for mandatory use of personal protective equipment 2.9 Establish procedures for monitoring and control of environmental dust release
3. Integrate equipment use, monitoring and maintenance with dust control procedures	3.1 Develop regular cleaning schedule for all surfaces in contact with graining or flour according to workplace requirements 3.2 Establish and confirm mill equipment condition monitoring schedule with maintenance department 3.3 Establish regular lubrication schedules for bearings, pulleys, shafts and other moving and friction surfaces 3.4 Promote use of anti-static materials where possible 3.5 Establish approval, tagging and monitoring procedures for use of all portable tools and equipment in mill
4. Establish fire and dust	4.1 Review adequacy of current dust control and dust explosion relief

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
explosion suppression systems	equipment and arrange for any required maintenance 4.2 Arrange for any required additional dust control/dust explosion relief equipment in existing protected areas 4.3 Investigate potential for use of fire and explosion suppression systems in areas not currently protected 4.4 Locate and establish inspection regime for all explosion relief panels 4.5 Set test and maintenance procedures for all existing fire and explosion suppression systems
5. Supervise dust and fire control training	5.1 Identify fire and dust wardens for mill areas 5.2 Establish emergency procedures according to site and workplace safety requirements 5.3 Identify dust and fire control content for use in induction training 5.4 Identify training needs of existing employees 5.5 Establish dust and fire control training arrangements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret automatic and manual monitoring techniques for dust control against enterprise needs - Interpret manuals, diagrams, drawings and other technical information
Writing	- Schedule housekeeping, training, and maintenance procedures to achieve objectives while minimising impact on production - Establish training records - Compile reports to disseminate information about equipment and milling performance to a range of audiences
Numeracy	Set an allocation for dust and fire control training in the training budget

Skill	Description
Navigate the world of work	• Monitor adherence to legal and regulatory standards and responsibilities for self and others • Consider own role in terms of contribution to broader goals of the work environment, and adapt and renegotiate role and responsibilities when this has the potential to increase effectiveness
Interact with others	• Appoint internal trainers and external training providers • Use appropriate language and communication skills to facilitate discussions • Clarify the purpose and possible actions to be taken as a result of work-related communications
Get the work done	• Analyse areas and equipment in grain enterprises for dust and fire risk • Identify current innovative practice and organisational trends • Use a computer, keyboard and software to collect and file research data • Source, collect and organise a range of data about performance against targets

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA4004 Establish and supervise dust control procedures in a grain processing enterprise	FDFGR4004A Establish and supervise dust control procedures in a grain processing enterprise	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPGRA4004 Establish and supervise dust control procedures in a grain processing enterprise

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- analysed work areas and equipment in grain enterprises for dust and fire risk
- scheduled housekeeping, training and maintenance procedures to achieve objectives while minimising impact on production, including:
 - scheduling maintenance for dust suppression systems and equipment, and explosion relief panels
 - bin and silo inspections and cleaning
 - testing and maintenance of fire and explosion suppression systems
- controlled potential ignition sources
- assessed adequacy of dust control and dust explosion relief equipment
- determined maintenance requirements
- assessed automatic and manual monitoring techniques against enterprise needs
- established procedures for reporting non-conformances
- established emergency procedures
- identified training needs of employees, including induction training.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- technologies and techniques for controlling grain dust in grain milling, handling and storage facilities, including:
 - pneumatic dust collection
 - housekeeping
 - enclosing of equipment
 - use of liquid additives

- misting and fogging (where permitted)
- advantages and disadvantages of mechanical and pneumatic product conveying
- types of bin/silo and exhaust designs and implications for dust generation and control
- requirements for a grain dust explosion to occur, including typical sources in a grain enterprise:
 - oxygen
 - ignition
 - fuel
 - contained space
- effects of fungal and pest infestation on grain and flour temperature
- minimum explosive concentrations (MEC) for grain dust in the milling or storage operation that will vary according to the type of grain and particle size
- location of bin explosion relief panels
- explosion suppression systems
- confined space procedures and regulations.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment relevant to flour milling operations
 - grain storage facilities
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1001 Pack or unpack product manually

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to pack or unpack product manually.

This unit applies to individuals who work alongside a supervisor in most situations and exercise limited autonomy. Applications include packing into or from primary or secondary (inner or outer) packaging. Product feed may be mobile (conveyors) or stationary.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to pack or unpack product	1.1 Read or listen to work instructions from supervisor and ask for clarification where necessary 1.2 Identify work health and safety hazards and report to supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Use appropriate personal protective equipment according to workplace procedures 1.4 Identify packaging requirements according to job specifications 1.5 Check packaging consumables against product type
2. Manually pack or unpack product	2.1 Pack or unpack product to meet customer and order specifications 2.2 Stack product according to required configurations 2.3 Identify unacceptable packaging consumables, product and packed products, and remove and correct, or tell supervisor 2.4 Maintain the work area in a clean and tidy state according to work health and food safety procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	• With guidance, identify main tasks, rights and responsibilities of own role • Follow instructions to complete a limited set of well-defined tasks • Meet a limited range of explicit workplace conventions and protocols
Interact with others	• Ask simple questions and listen carefully to clarify understanding or seek further information • Follow basic communication protocols and conventions • Recognise basic values, beliefs and cultural expectations of others • Follow scripts or use simple templates for routine communication tasks
Get the work done	• Follow simple, clear instructions • Keep track of work activities • Recognise and seek guidance to correct simple problems • Take responsibility for and reflect on low-impact decisions • Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1001 Pack or unpack product manually	FDFOP1001A Pack or unpack product manually	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1001 Pack or unpack product manually

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has packed or unpacked product manually on at least one occasion, including:

- accessing workplace information on product and packaging requirements and procedures
- selecting, fitting and using personal protective equipment (PPE)
- confirming supply of packaging components and consumables appropriate for product type
- confirming that product is in correct condition, including confirming product and date codes, and product characteristics, weight and appearance
- pacing work to meet production requirements
- packing or unpacking product to meet specifications, including:
 - checking positioning of product within packaging
 - inspecting appearance and confirming that the packaged product meets customer and quality requirements
- correcting and/or reporting product and/or packaging that is out-of-specification within level of responsibility
- maintaining work area to meet housekeeping standards, including cleaning and sanitising equipment and surfaces
- operating basic packaging equipment related to manual packing function
- stacking or placing product according to requirements for stacking configurations
- following work health and safety and food safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and function of packaging

- quality requirements of packaging components and consumables, the packing process, and the effect of outputs on both the further stages of packaging and storage, and on the final consumer
- packaging components and consumables used for each product type
- packaging, unpacking and/or wrapping and/or placement procedures for each product type
- consequences of incorrect procedures or configuration
- specifications for packing/packaging product and related equipment, components and consumables as required, including identifying any special packing/packaging requirements of particular customers
- storage and handling requirements of product
- contamination/food safety risks associated with manual packing and related control measures
- common causes of variation in both product presented for packing and packing components and consumables, and corrective action required
- work health and safety hazards and controls, including appropriate materials handling techniques related to the role
- services required, and action to take if services are not available.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - relevant materials, packaging components and consumables, and related equipment
 - workplace forms and records as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - production schedule and batch instructions
 - packaging specifications
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment as required
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1002 Operate automated washing equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare, load and operate automated washing equipment.

This unit applies to individuals who work alongside a supervisor, in most situations, and exercise limited autonomy.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare washing equipment for operation	1.1 Read or listen to work instructions from supervisor and ask for clarification where necessary 1.2 Identify work health and safety hazards and tell supervisor 1.3 Use appropriate personal protective equipment according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Identify and load items to be washed according to job specifications 1.5 Confirm equipment and service are ready for use 1.6 Select wash cycle settings to meet safety and wash requirements
2. Operate and monitor the equipment	2.1 Conduct pre-start checks according to workplace procedures 2.2 Operate equipment and monitor to identify variation in operating conditions 2.3 Identify variation in equipment operation and report maintenance requirements 2.4 Shut equipment down safely according to workplace procedures 2.5 Unload washed items, and position in required location 2.6 Keep work area clean and tidy according to work health and food safety procedures 2.7 Clean equipment and complete records, as required by workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	• With guidance, identify main tasks, rights and responsibilities of own role • Follow instructions to complete a limited set of well-defined tasks • Meet a limited range of explicit workplace conventions and protocols
Interact with others	• Ask simple questions and listen carefully to clarify understanding or seek further information • Follow basic communication protocols and conventions • Recognise basic values, beliefs and cultural expectations of others • Follow scripts or use simple templates for routine communication tasks

Skill	Description
Get the work done	• Follow simple, clear instructions • Keep track of work activities • Recognise and seek guidance to correct simple problems • Take responsibility for and reflect on low-impact decisions • Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1002 Operate automated washing equipment	FDFOP1002A Operate automated washing equipment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1002 Operate automated washing equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated automated washing equipment on at least one occasion, including:

- selecting, fitting and using appropriate personal protective equipment (PPE)
- checking that equipment, chemical supply and services are ready for operation
- identifying washing requirements and selecting appropriate equipment settings
- loading items to be washed
- conducting pre-start checks
- operating and monitoring equipment to identify variation in operating conditions
- identifying variation in equipment operation and reporting maintenance requirements
- removing and positioning items as required
- handling washed items to meet hygiene and sanitation requirements
- locating emergency stop functions on equipment
- shutting down equipment as required
- maintaining work area to meet housekeeping standards
- using basic process control screens and panels according to enterprise procedures
- completing workplace records according to enterprise procedures
- cleaning equipment as required
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose, functions and basic operation of equipment
- operating cycles and application to washing requirements
- required output and quality of cleaning/sanitising to be met by the washing process

- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of faults or unacceptable performance of the container washing process and related troubleshooting procedures within level of responsibility
- work health and safety hazards and controls
- shutdown and cleaning procedures, including isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting problems
- environmental issues and controls relevant to equipment operation, including waste collection and handling procedures related to the container washing process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- recording procedures and responsibilities
- cleaning and sanitation requirements.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - automated washing equipment and accessories
 - items to be washed
 - services as required
 - relevant work health and safety clothing and equipment
 - workplace forms and records
 - cleaning procedures, materials and equipment as required
- specifications:
 - work procedures, including advice on safe work practices
 - washing schedules and specifications
 - MSDS where appropriate
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1003 Communicate workplace information

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to gather, convey and receive workplace information and to interact with others at work.

This unit applies to individuals working in a food production environment. It typically targets the production worker responsible for applying basic communication skills to support work practices while working alongside a supervisor in most situations and exercising limited autonomy.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Exchange verbal information	1.1 Identify information requirements according to workplace procedures 1.2 Ask questions to seek or clarify information 1.3 Apply effective listening skills to receive information 1.4 Use interactive skills to communicate effectively with others

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.5 Provide information in a timely and appropriate form
2. Locate and use workplace information	2.1 Locate sources of workplace information according to workplace procedures 2.2 Use information to carry out work responsibilities 2.3 Respond to instructions
3. Complete workplace documentation	3.1 Identify forms required for work operations 3.2 Complete and submit forms as required according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	- With guidance, identify main tasks, rights and responsibilities of own role - Meet a limited range of explicit workplace conventions and protocols
Interact with others	- Follow basic communication protocols and conventions - Recognise and respect the different expectations of others
Get the work done	Follow instructions to complete a limited set of well-defined tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1003 Communicate workplace information	FDFOP1010A Communicate workplace information	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1003 Communicate workplace information

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has communicated workplace information covering each of the following points at least once:

- seeking information from people in the workplace to support work roles and responsibilities
- providing information to other people
- locating and using information to respond to a workplace instructions
- correctly completing a workplace form or other required document.

In completing the above points, the individual must demonstrate:

- the use of questions to obtain or clarify information requirements
- interactive communication processes
- communicating effectively.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- communication channels and forums, including consultative arrangements established in the workplace
- common colloquial and technical terms relating to work function
- sources of information and advice relating to own job
- methods used to access information in a food production workplace
- interactive techniques, including active listening, questioning, seeking and responding to feedback, and interacting effectively with others
- recognition of different methods and styles of communication.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - workplace information
 - workplace forms
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1004 Prepare basic mixes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to combine ingredients and additives in the correct quantities and to operate mixing and blending equipment to prepare basic mixes.

This unit applies to individuals who work alongside a supervisor in most situations and exercise limited autonomy. It has application in a variety of food processing operations, involving basic mixes made using pre-mix ingredients and/or where the knowledge of ingredient sequencing and ingredient characteristics is minimal.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for mixing/blending	1.1 Read or listen to work instructions from supervisor and ask for clarification where necessary

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Use appropriate personal protective equipment as required 1.4 Check that materials are available to meet production requirements 1.5 Identify and measure required ingredients according to workplace procedures 1.6 Enter processing or operating parameters for mixing or blending to meet safety and production requirements 1.7 Check equipment performance and adjust according to operating requirements 1.8 Perform pre-start checks according to operator instructions
2. Operate and monitor the mixing/blending process	2.1 Add ingredients to the mixer in the required quantities to meet recipe specifications 2.2 Start the mixing and blending process according to work health and safety and operating procedures 2.3 Monitor equipment to identify variation in operating conditions and report maintenance requirements 2.4 Monitor the mixing process to confirm that specifications are met 2.5 Identify and report or rectify out-of-specification product and process outcomes 2.6 Maintain a clean and tidy work area according to workplace procedures
3. Shut down the mixing/blending process	3.1 Identify and apply the shut-down procedure safely according to operating procedures 3.2 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of	With guidance, identify main tasks, rights and responsibilities of

Skill	Description
work	own role - Follow instructions to complete a limited set of well-defined tasks - Meet a limited range of explicit workplace conventions and protocols
Interact with others	- Ask simple questions and listen carefully to clarify understanding or seek further information - Follow basic communication protocols and conventions - Recognise basic values, beliefs and cultural expectations of others - Follow scripts or use simple templates for routine communication tasks
Get the work done	- Follow simple, clear instructions - Keep track of work activities - Recognise and seek guidance to correct simple problems - Take responsibility for and reflect on low-impact decisions - Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1004 Prepare basic mixes	FDFOP1004A Prepare basic mixes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR1004 Prepare basic mixes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has prepared basic mixes on at least one occasion, including:

- accessing workplace information to identify mixing and blending requirements
- selecting, fitting and using PPE
- confirming supply of necessary materials and services
- conducting pre-start checks
- adding/loading materials in correct quantities and sequence
- starting, monitoring and checking the blending/mixing process and control points to achieve required outcomes within specification
- monitoring supply and flow of ingredients to and from the blending/mixing process
- pacing mixing/blending to meet production requirements
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following procedures to shut down and clean equipment within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using simple process control screens according to enterprise procedures
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic functions and operating principles of equipment used
- services required and action to take if services are not available
- the flow of the mixing process and the effect of mix preparation on downstream processes

- ingredient handling requirements and shelf-life/coding
- quality characteristics required of ingredients used
- required attributes of the mixed/blended output
- the effect of the mixing/blending parameters
- contamination/food safety risks associated with the process and related control measures, including product compatibility and cross-contamination risks, and associated cleaning requirements
- operating requirements and parameters, and corrective action required, where operation is outside specified operating parameters
- procedures and responsibility for reporting production and performance information
- work health and safety hazards and controls
- shutdown and cleaning procedures, including isolation, lock-out and tag-out procedures and responsibilities
- environmental issues and controls, including waste/rework collection and handling procedures related to the process
- cleaning and sanitation procedures for preparing basic mixes.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - mixing/blending process equipment, services and related storage facilities as required
 - ingredients and additives required for the mixing/blending process
 - sampling schedules, and test procedures and equipment as required
 - cleaning procedures, materials and equipment as required
 - items of equipment to be operated and relevant materials, consumables and services
 - workplace records and forms as required
 - cleaning procedures, materials and equipment as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch/recipe instructions
 - specifications, control points and processing parameters
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1005 Operate basic equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to operate basic equipment that requires limited application of equipment and process knowledge, and limited equipment adjustment.

This unit applies to individuals who work alongside a supervisor in most situations and exercise limited autonomy. The unit has generic application in a wide range of situations and should be customised for equipment not covered by any other specific unit.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Follow workplace procedures to operate equipment	1.1 Read or listen to work instructions from supervisor and ask for clarification where necessary 1.2 Identify work health and safety hazards and tell supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Use appropriate personal protective equipment as required 1.4 Check equipment to confirm it is ready and safe to operate according to workplace procedures, including safety requirements 1.5 Conduct pre-start checks according to operator instructions 1.6 Start and operate equipment to achieve required outcome according to work health and safety and operating procedures
2. Monitor and complete equipment operation	2.1 Monitor equipment to identify variation in operating conditions 2.2 Identify and report variation in equipment operation and maintenance requirements 2.3 Shut down equipment safely according to operating procedures 2.4 Maintain a clean and tidy work area according to work health and safety procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	• With guidance, identify main tasks, rights and responsibilities of own role • Follow instructions to complete a limited set of well-defined tasks • Meet a limited range of explicit workplace conventions and protocols
Interact with others	• Ask simple questions and listen carefully to clarify understanding or seek further information • Follow basic communication protocols and conventions • Recognise basic values, beliefs and cultural expectations of others • Follow scripts or use simple templates for routine communication tasks
Get the work done	• Follow simple, clear instructions • Keep track of work activities • Recognise and seek guidance to correct simple problems • Take responsibility for and reflect on low-impact decisions

Skill	Description
	Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1005 Operate basic equipment	FDFOP1005A Operate basic equipment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1005 Operate basic equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated basic equipment on at least one occasion, including:

- accessing workplace information about equipment operating requirements and procedures
- selecting, fitting and using PPE
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and that all safety guards are in place and operational
- starting and operating equipment according to procedure
- monitoring the output of equipment operation against requirements
- taking corrective action in response to out-of-specification results
- shutting down and cleaning equipment as required
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- maintaining work area to meet housekeeping standards
- using basic process control screens and panels according to enterprise procedures
- completing workplace records according to enterprise procedures
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic operating principles of equipment used, such as main equipment components, status and purpose of guards, emergency stop, isolation and lock-out controls, and equipment operating capacities and applications
- services required and action to take if services are not available
- quality requirements of materials/consumables used and the effect of variation on outputs
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- contamination/food safety risks associated with equipment operation and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- shut-down and cleaning procedures, including isolation, lock-out and tag-out procedures and responsibilities
- environmental issues and controls relevant to equipment operation, including waste collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- recording procedures and responsibilities relevant to operating basic equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - item of equipment to be operated, and relevant materials, consumables and services
 - workplace forms and records
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- relationships (internal and/or external):
 - person/s to communicate with.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1006 Monitor process operation

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to monitor the operation of equipment used in a production process.

This unit applies to individuals who work in a food production environment alongside a supervisor in most situations and exercise limited autonomy.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor equipment operation	1.1 Read or listen to work instructions from supervisor and ask for clarification where necessary 1.2 Identify work health and safety hazards and tell supervisor 1.3 Use appropriate personal protective equipment as required 1.4 Inspect and monitor equipment to confirm safety and operating

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	condition 1.5 Maintain materials and consumable levels as required 1.6 Maintain workplace records according to workplace procedures 1.7 Maintain a clean and tidy work area according to work health and safety procedures
2. Identify and respond to non-conformance	2.1 Monitor the process to confirm performance is maintained within specification 2.2 Identify and report out-of-specification product, process and equipment performance

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	• With guidance, identify main tasks, rights and responsibilities of own role • Follow instructions to complete a limited set of well-defined tasks • Meet a limited range of explicit workplace conventions and protocols
Interact with others	• Ask simple questions and listen carefully to clarify understanding or seek further information • Follow basic communication protocols and conventions • Recognise basic values, beliefs and cultural expectations of others • Follow scripts or use simple templates for routine communication tasks
Get the work done	• Follow simple, clear instructions • Keep track of work activities • Recognise and seek guidance to correct simple problems • Take responsibility for and reflect on low-impact decisions • Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1006 Monitor process operation	FDFOP1006A Monitor process operation	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1006 Monitor process operation

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has monitored the operation of equipment used in a production process on at least one occasion, including:

- selecting, fitting and using appropriate personal protective equipment
- monitoring the process and equipment operation to maintain the process within the required parameters, such as conducting visual inspections and basic tests
- monitoring supply and flow of materials and/or consumables to and from the process, such as replenishing material inputs and removing processed materials or product
- identifying and taking action to correct out-of-specification results within level of responsibility and, where corrective action is outside level of responsibility, reporting to appropriate personnel
- maintaining work area to meet housekeeping standards
- recording workplace information according to enterprise procedures
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose of equipment used in production process
- required output and quality requirements to be met by the production process
- basic operating principles of equipment used, such as main equipment components, status and purpose of guards, and emergency stop, isolation and lock-out controls, and, where required, the operating features of the control panel and the relationship between control panel functions and the physical equipment
- common causes of faults or unacceptable performance, and action required within level of responsibility

- procedures and responsibility for reporting problems arising from monitoring process operations
- work health and safety hazards and controls for monitoring process operations
- recording system and responsibilities for monitoring process operation.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - production/packaging equipment and related services
 - materials and consumables as required
 - relevant work health and safety clothing and equipment
 - workplace forms
- specifications:
 - work procedures, including advice on safe work practice
 - production schedules and specifications
 - MSDS where appropriate
 - housekeeping standards and procedures
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1007 Participate effectively in a workplace environment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to participate effectively in a workplace environment.

This unit applies to individuals in any work environment who work alongside a supervisor in most situations and exercise limited autonomy. This unit serves as an introduction to the responsibilities of the worker, and the products and processes of the company.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Obtain information about the industry	1.1 Access sources of information about the industry 1.2 Collect information to assist effective and safe work performance within the industry 1.3 Obtain and update specific information on sector of work

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Apply industry and work health and safety information to day-to-day work activities 1.5 Describe employment terms and conditions 1.6 Explain career pathways within the industry
2. Observe employment requirements	2.1 Identify industry developments in the workplace context that could be used to improve quality, productivity and conditions 2.2 Confirm that work practices comply with codes of practice and workplace expectations within level of responsibility 2.3 Identify contribution of own work role to organisational outputs 2.4 Ensure that dress and personal requirements comply with workplace standards 2.5 Observe punctuality in work attendance according to workplace procedures 2.6 Meet employer expectations through completion of workplace routines and specific instructions
3. Accept responsibility for quality of own work	3.1 Keep personal work space in a well-organised and safe condition 3.2 Adhere to the workplace code of conduct 3.3 Detect variations in the quality of service or products from required standards, and report as required
4. Plan and conduct own work	4.1 Follow instructions from supervisor and relevant people 4.2 Identify factors affecting work requirements and take appropriate action 4.3 Assess work load and prioritise within allocated timeframes 4.4 Communicate clearly, to the appropriate person, the need for assistance to improve performance
5. Promote workplace cooperation	5.1 Undertake responsibilities and duties in a positive manner to promote cooperation and good relationships 5.2 Conduct cooperation with others in a courteous manner, appropriate to culture, special needs and linguistic background, and position in the organisation 5.3 Recognise problems and conflict, and resolve through personal communication where possible, or refer to a supervisor, manager or employer for resolution

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
6. Contribute to a productive work environment	6.1 Share information relevant to work with co-workers to ensure designated work goals are met 6.2 Share knowledge and skills with co-workers through conversations and meetings 6.3 Recognise and seek contributions of individuals of different gender and social and cultural backgrounds 6.4 Ensure work is consistent with workplace standards relating to antidiscrimination and workplace harassment
7. Undertake an activity to workplace requirements	7.1 Discuss knowledge and skills required for task with supervisors and co-workers 7.2 Check the availability of materials and equipment to ensure they are consistent with work schedules and the requirements of the task 7.3 Create a daily schedule for completing workplace activities and allocated tasks, including priorities, allocated start times, estimation of completion times and materials, equipment and assistance required for completion

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	• With guidance, identify main tasks, rights and responsibilities of own role • Follow instructions to complete a limited set of well-defined tasks • Meet a limited range of explicit workplace conventions and protocols
Interact with others	• Ask simple questions and listen carefully to clarify understanding or seek further information • Follow basic communication protocols and conventions • Recognise basic values, beliefs and cultural expectations of others • Follow scripts or use simple templates for routine communication tasks

Skill	Description
Get the work done	• Follow simple, clear instructions • Keep track of work activities • Recognise and seek guidance to correct simple problems • Take responsibility for and reflect on low-impact decisions • Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1007 Participate effectively in a workplace environment	FDFOP1007A Participate effectively in a workplace environment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1007 Participate effectively in a workplace environment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has participated effectively in a workplace environment on at least one occasion, including:

- identifying and accessing information on conditions of employment and workplace policies and procedures
- applying work policies and procedures to work activity
- locating workplace amenities and facilities relevant to work responsibilities
- describing key products, functions and activities of the organisation
- identifying own work role within organisational activities and outputs
- identifying and locating materials/storage areas in the workplace, relevant to work role, such as locating tank farms and other bulk storage locations and identifying special storage conditions (e.g. hazardous goods and temperature controlled stores areas)
- identifying and locating production and packing processes/main work areas in the workplace
- sharing information and collaborating with other employees to complete work tasks
- planning own work tasks and completing within required timelines
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace structure and key personnel
- rights and responsibilities of employees as defined in employment conditions
- company policies and procedures relating to work responsibilities, including areas covered by legislation and related responsibilities
- appropriate personal conduct in a work area, including:

- minimum clothing and personal hygiene standards when entering and moving around a food processing area in order to protect both employees and product safety
- behaving appropriately towards others in the work area
- work health and safety hazards and controls
- industrial representation arrangements
- site security arrangements, including responsibility to report when coming on and off site
- site layout, including main facilities, such as canteens, parking areas, storage areas, processing and packing areas, and location of emergency exits and assembly areas
- the main products/product range produced in the workplace
- stages and processes used to manufacture and package products
- personal reporting roles and responsibilities.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - site maps
 - workplace forms
- specifications:
 - advice on work roles and responsibilities
 - advice on workplace policies, codes of practice, procedures, structure and personnel
 - advice on conditions of employment and entitlements
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1008 Take and record basic measurements

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to use basic measuring equipment and devices, and read and record the results.

This unit applies to individuals who work alongside a supervisor in most situations and exercise limited autonomy. Applications include simple tests that involve automated measuring devices.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OP)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify measurement requirements	1.1 Identify the purpose of the measuring task 1.2 Identify measuring requirements, including frequency and accuracy range 1.3 Confirm that measuring equipment is available and fit for purpose

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Take measurements	2.1 Carry out measuring tasks to requirements and according to work health and safety procedures 2.2 Check measurement results for accuracy 2.3 Identify non-standard or out-of-range results and report to supervisor 2.4 Record the results of measurements in the required format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	- With guidance, identify main tasks, rights and responsibilities of own role - Follow instructions to complete a limited set of well-defined tasks - Meet a limited range of explicit workplace conventions and protocols
Interact with others	- Ask simple questions and listen carefully to clarify understanding or seek further information - Follow basic communication protocols and conventions - Recognise basic values, beliefs and cultural expectations of others - Follow scripts or use simple templates for routine communication tasks
Get the work done	- Follow simple, clear instructions - Keep track of work activities - Recognise and seek guidance to correct simple problems - Take responsibility for and reflect on low-impact decisions - Recognise and support the application of new ideas

Unit Mapping Information

Code and title	Code and title	Comments	Equivalence status

current version	previous version		
FBPOPR1008 Take and record basic measurements	FDFOP1008A Take and record basic measurements	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1008 Take and record basic measurements

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has used basic measuring equipment and devices and read and recorded the results on at least one occasion, including:

- accessing workplace information on measurement requirements and procedures relating to own work, including information about the types of measurements to be carried out, the equipment/devices to be used, frequency of measurement, and related recording requirements
- locating measuring equipment/device and confirming that it is suitable for use (this will vary depending on the nature of the equipment/device), such as taring scales, and confirming calibration of devices (e.g. pH meters)
- locating materials/items to be measured
- following procedures to conduct measurements
- determining and interpreting measurement results, including checking measurement accuracy, and, where results are out of the required range, reporting to appropriate personnel and following instructions on corrective action
- recording results as required in the appropriate format, such as completing log sheets
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose of measuring as applied to work responsibilities, and related measuring equipment and units of measurement, including the required accuracy of the measurement and the capability/accuracy level of equipment used

- measuring equipment/device preparation requirements and purpose, including calibration requirements and responsibilities for maintaining accurate measuring equipment/devices (at this level, responsibility may involve confirming calibration by following defined check methods)
- work health and safety hazards associated with using the measuring equipment/device and related safe operating procedures
- typical/required range for measurement results
- common factors and conditions that could affect the measurement result
- procedures to follow where measurements are out of range, such as repeating the measurement one or more times
- consequences of measurements that are out of range
- responsibilities to report measurement information.
-

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - measuring equipment/devices
 - materials/items to be measured
 - recording and reporting system
- specifications:
 - work procedures and instructions relating to measuring requirements, including advice on safe work practices.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR1009 Follow work procedures to maintain quality

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to follow basic quality assurance practices related to monitoring quality where work involves routine manual processes or operation of simple automated equipment.

This unit applies to individuals who work alongside a supervisor in a food processing environment and exercise limited autonomy. It typically targets the production worker responsible for following quality procedures in own work operations.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Monitor quality of work outcome	1.1 Identify quality requirements according to workplace procedures 1.2 Inspect inputs to confirm capability to meet quality requirements 1.3 Follow work procedures according to workplace requirements
2. Identify and report unacceptable inputs and	2.1 Check work area, materials, processes and product routinely to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
outputs	ensure compliance with quality requirements 2.2 Identify unacceptable quality and take corrective action within the level of responsibility to maintain quality standards 2.3 Report quality variation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	- With guidance, identify main tasks, rights and responsibilities of own role - Follow instructions to complete a limited set of well-defined tasks - Meet a limited range of explicit workplace conventions and protocols
Interact with others	- Ask simple questions and listen carefully to clarify understanding or seek further information - Follow basic communication protocols and conventions - Recognise basic values, beliefs and cultural expectations of others - Follow scripts or use simple templates for routine communication tasks
Get the work done	- Follow simple, clear instructions - Keep track of work activities - Recognise and seek guidance to correct simple problems - Take responsibility for and reflect on low-impact decisions - Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR1009	FDFOP1009A	Updated to meet	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
Follow work procedures to maintain quality	Follow work procedures to maintain quality	Standards for Training Packages	

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR1009 Follow work procedures to maintain quality

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has followed work procedures to maintain quality on at least one occasion, including:

- accessing and applying workplace information on quality requirements for own work
- identifying control points or inspection points for own work and related methods used to monitor quality
- carrying out relevant checks and inspections as required, such as checks and inspections on equipment, materials, product, packaging consumables and processing conditions relevant to own work
- identifying and responding to out-of-specification or unacceptable inputs and/or outputs, such as making adjustments within level of responsibility and/or reporting
- maintaining quality of own work
- recording quality data in required format according to enterprise procedures
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- quality policy, procedures and responsibilities
- quality personnel and their respective responsibilities, such as internal personnel and external auditors
- requirements of internal and external customers
- sources of advice on quality requirements for own work
- control points for own work, including the purpose of the control point, the risk if not controlled and the method of control where relevant
- monitoring, inspection and checking procedures relating to process control requirements
- evidence of out-of-specification or unacceptable performance

- procedures for responding to out-of-specification or unacceptable performance/outcomes
- responsibilities for reporting and recording quality information
- recording requirements and responsibilities for maintaining quality.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - workplace procedures and forms
- relationships (internal and/or external):
 - person/s with whom to communicate.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2001 Work effectively in the food processing industry

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to work effectively in the food processing industry by applying an understanding of the structure of the industry, workplace policies and procedures, and conditions relevant to the level of responsibility.

This unit applies to individuals who perform a defined range of routine and predictable activities under general supervision and exercise limited autonomy and accountability in any sector of the food processing industry.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify the food processing industry	1.1 Identify sectors within the food processing industry 1.2 Identify key sector representatives and their roles 1.3 Understand workplace procedures common to employment in the

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	sector 1.4 Identify types of employment and key responsibilities in the food processing industry
2. Identify key production processes and supply chains	2.1 Recognise raw materials used in the workplace and their source 2.2 Recognise the range of products produced in the workplace 2.3 Identify workplace production processes for converting materials into products 2.4 Identify common products and supply chains in the food processing industry
3. Carry out work responsibilities according to policies and procedures	3.1 Operate according to basic conditions of employment 3.2 Apply workplace policies and procedures when carrying out work role 3.3 Identify rights, responsibilities and legal obligations relevant to own role 3.4 Identify key personnel and their roles in the workplace 3.5 Apply employability skills required for working effectively 3.6 Recognise the consequences of not following workplace environmental and safety policies and practices
4. Take responsibility for own skill development	4.1 Identify the skills required for work role and assess learning needs 4.2 Participate in opportunities for skill development 4.3 Take responsibility for own work tasks and role 4.4 Monitor own work against workplace standards and identify areas for improvement and take action 4.5 Use basic problem-solving strategies to address problems, inconsistencies or concerns when fulfilling work role

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Navigate the world of work	• Meet a limited range of explicit workplace conventions and protocols
Interact with others	• Ask simple questions and listen carefully to clarify understanding or seek further information • Follow basic communication protocols and conventions to contribute to basic workgroup processes • Recognise basic values, beliefs and cultural expectations of others • Use simple templates for routine tasks
Get the work done	• Recognise simple problems and seek guidance to correct • Take responsibility for and reflect on low-impact decisions • Recognise and support the application of new ideas

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2001 Work effectively in the food processing industry	FDFOP2001A Work effectively in the food processing industry	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2001 Work effectively in the food processing industry

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has worked effectively in the food processing industry on at least one occasion, including:

- identifying information on conditions of employment and workplace policies and procedures
- identifying and locating materials/storage areas in the workplace relevant to work role, and identifying special storage conditions
- identifying and locating production and packing processes/main work areas in the workplace
- displaying appropriate behaviour when interacting with others and moving around the workplace
- explaining employee responsibilities
- explaining the dispute resolution procedures in the workplace
- explaining the flow of product from receipt to sale in own workplace
- explaining the nature and role of work instructions and standard operating procedures (SOPs)
- explaining the principles of equal employment opportunity (EEO) and policies to prevent sexual harassment and other forms of discrimination
- following relevant workplace policies
- identifying and explaining the relevance of work health and safety and regulatory requirements for food industry employees
- identifying workplace employment conditions
- identifying relevant workplace requirements, policies and procedures and explaining their implications for trainees
- listing the markets where products are distributed
- naming the products produced in own workplace
- outlining enterprise ethical standards and requirements for interacting with other employees and staff

- relating to others in an effective and non-discriminatory way, showing mutual respect
- applying environmental practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace structure and key personnel
- rights and responsibilities of employees as defined in employment conditions
- workplace policies and procedures relating to work responsibilities, including areas covered by legislation and related responsibilities
- appropriate personal conduct in a work area, including minimum clothing and personal hygiene standards when entering and moving around a food processing area in order to protect both employees and product safety, and behaving appropriately towards others in the work area
- industrial representation arrangements
- site security arrangements, including responsibility to report when coming on-site and off-site
- site layout, including main facilities, including canteens, parking areas, storage areas, processing and packing areas and location of emergency exits and assembly areas
- the main products/product range produced in the workplace
- work health and safety hazards and controls in the workplace
- stages and processes used to manufacture and package products
- personal reporting roles and responsibilities.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - site maps
 - workplace access
- specifications:
 - workplace policies, codes of practice, procedures, structure and personnel
 - work roles and responsibilities, training and career information
 - conditions of employment and entitlements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2002 Inspect and sort materials and product

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to inspect and sort product and incoming materials ready for processing.

This unit has application in a production environment within the food processing industry. Inspection at this level is typically limited to visual inspection.

This unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Inspect materials and product to confirm	1.1 Read or listen to work instructions from supervisor and clarify where required

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
fitness for use	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm the type and quality requirements of materials and product according to workplace procedures 1.5 Convey or transfer materials and product to required locations
2. Sort materials and product	2.1 Inspect materials and product to confirm quality requirements are met 2.2 Sort product and incoming materials to meet production requirements 2.3 Identify and report unacceptable quality according to workplace procedures 2.4 Maintain a clean and tidy workplace according to workplace and safety procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret material and product instructions and requirements
Navigate the world of work	- Follow workplace procedures, including work health and safety requirements, relating to own role and work area - Demonstrate a duty of care to self and others
Interact with others	- Communicate effectively and cooperate with supervisor and co-workers, including reporting problems - Use active listening and questioning to clarify and confirm supervisor instructions
Get the work done	- Follow instructions and make routine decisions related to materials and product inspection and sorting - Maintain a clean and hazard-free work area

Skill	Description
	• Maintain hygiene standards and wear required personal protective equipment • Identify out-of-specification or non-conforming product and follow procedures to separate unacceptable product

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2002 Inspect and sort materials and product	FDFOP2002A Inspect and sort materials and product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2002 Inspect and sort materials and product

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has inspected and sorted product and incoming materials, on at least one occasion, including:

- accessing workplace information on materials specification/quality requirements
- selecting, fitting and using personal protective equipment
- inspecting quality of materials to confirm compliance with quality specifications, including:
 - product type and quantity
 - product condition, such as identifying any bruising, discolouration or other damage, confirming product is clean, and checking size and weight
- identifying out-of-specification or non-conforming product and following procedures to separate unacceptable product
- responding to and/or reporting equipment failure within level of responsibility
- maintaining work area to meet housekeeping standards
- completing workplace records as required according to workplace procedures
- procedures for operating materials transfer equipment as required according to workplace procedures
- following work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and standards to be met by the inspection and sorting process, including criteria and specifications as they apply to inspection and sorting requirements

- the relationship between visual inspection and sorting and other inspection procedures, such as those that may be conducted by a laboratory or at subsequent processing stages
- typical causes of unacceptable or out-of-specification product, including causes of product damage that can occur prior to arrival at the plant and as part of the handling process
- the stages that occur in the inspection and sorting process and their effect on product, such as in-line cleaning or conditioning and product or materials transfer stages
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- contamination/food safety risks associated with the sorting process and related control measures
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to equipment operation, including waste collection and handling procedures related to the process
- basic operating principles of equipment used, where relevant, including main equipment components, status and purpose of guards, emergency stop, isolation and lock-out controls, equipment operating capacities and applications
- services required and action to take if services are not available
- recording procedures and responsibilities for inspecting and sorting materials and product.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - product and incoming materials
 - appropriate personal protective equipment and other equipment
 - reporting and monitoring systems
- specifications:
 - workplace information on materials specification/quality requirements
 - work instructions and procedures
 - basic operating principles of equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2003 Prepare and monitor beer yeast propagation processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare and monitor beer yeast propagation processes.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for propagation	1.1 Identify and confirm propagation requirements 1.2 Wear appropriate personal protective clothing and ensure correct fit

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Prepare yeast cultures for use according to specifications 1.4 Confirm product and materials are available to meet propagation requirements 1.5 Prepare product to meet specified propagation requirements 1.6 Confirm propagation services are available and ready for operation
2. Prepare equipment for culture preparation	2.1 Check cleaning and sterilising equipment to confirm readiness for use 2.2 Select, clean and sterilise propagation equipment according to work health and safety and food safety procedures 2.3 Select, clean and sterilise transfer equipment according to work health and safety and food safety procedures 2.4 Start up the beer yeast propagation process according to work health and safety and operating requirements
3. Maintain and monitor the propagation process	3.1 Conduct transfer operations to meet propagation requirements 3.2 Conduct the culture propagation process according to workplace procedures 3.3 Make scale-up additions to ensure optimum performance 3.4 Monitor control points to confirm performance is maintained within specification 3.5 Monitor equipment to confirm operating condition 3.6 Identify, rectify and/or report out-of-specification product, process and equipment performance according to workplace procedures
4. Complete propagation activities	4.1 Complete the propagation process according to workplace procedures 4.2 Dismantle equipment and prepare for cleaning according to workplace requirements 4.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures 4.4 Conduct work in accordance with workplace environmental guidelines 4.5 Record workplace information in the appropriate format according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2003 Prepare and monitor beer yeast propagation processes	FDFOP2074A Prepare and monitor beer yeast propagation processes	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2003 Prepare and monitor beer yeast propagation processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has prepared and monitored beer yeast propagation processes on at least one occasion, including:

- accessing workplace information to identify culture propagation requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary product, materials and services
- liaising with other work areas
- preparing product and materials, including:
 - culture yeast slopes
 - oxygenated wort
 - yeast nutrients
 - oxygen supply and sterilisation
 - wort heating
 - wort sterilisation
- confirming equipment status and condition, including checking:
 - cleaning and/or sterilisation requirements have been met
 - position and alignment of valves
 - integrity of door seals and small vessel tubing and condition of gas (oxy) filters
- starting up the process
- monitoring the process and equipment operation to identify out-of-specification results or non-compliance, including sampling and checking:
 - temperature (wort)
 - wort gravity
 - wort oxygenation levels
 - yeast cell counts
 - yeast viability

- monitoring supply and flow of product and materials to and from the process
- taking corrective action in response to out-of-specification results or non-compliance
- reporting and/or recording corrective action
- sorting, collecting, treating, recycling or disposing of waste
- shutting down equipment in response to an emergency situation
- shutting down equipment in response to routine shutdown requirements
- recording workplace information
- maintaining work area to meet housekeeping standards
- preparing equipment for cleaning, including draining and/or dismantling equipment, and removing waste either manually or by rinsing, in preparation for sanitation
- identifying, rectifying and/or reporting environmental non-compliance
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and principles of propagating yeast cultures
- relationship of propagation to alcoholic fermentation
- stages and changes that occur during culture propagation
- effect of process stages on end product
- quality characteristics and uses of yeast cultures
- product and materials preparation requirements, and the effect of variation on the process
- main methods used in propagating yeast for beer production
- the fermentation reaction for yeast cultures
- techniques that may be used to manipulate the propagation process and end product characteristics, including:
 - temperature
 - yeast strain
 - wort stream
 - wort gravity
 - additions (nutrients)
 - oxygen
- process specifications, procedures and operating parameters relevant to beer yeast propagation
- equipment and instrumentation components, purpose and operation required for beer yeast propagation processes
- basic operating principles of process control systems
- services used in the beer yeast propagation processes
- significance and method of monitoring control points within the process
- common causes of variation with equipment and corrective action required
- work health and safety hazards and controls for beer yeast propagation processes

- lock-out and tag-out procedures required for beer yeast propagation processes
- procedures and responsibility for reporting problems relating to the beer yeast propagation processes
- environmental issues and controls relevant to yeast propagation processes
- shutdown and cleaning requirements associated with changeovers, and types of shutdowns
- waste handling requirements and procedures for beer yeast propagation processes
- recording requirements and procedures for beer yeast propagation processes.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - equipment, services and corresponding information
 - products and materials
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements
 - instructions, information, specifications and schedules
 - documentation and recording requirements and procedures

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2004 Operate a beer packaging process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a beer packaging process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a beer packaging process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the packaging process for operation	1.1 Check packaging requirements according to workplace procedures and food safety requirements 1.2 Confirm availability of required materials according to job

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	specifications 1.3 Confirm availability of services according to job specifications 1.4 Wear appropriate personal protective clothing and ensure correct fit 1.5 Conduct pre-start checks of packaging equipment, including checking that hygiene and sanitation standards are met and all safety guards are in place 1.6 Set the packaging process to meet production requirements
2. Operate and monitor the packaging process	2.1 Start up the packaging process according to workplace procedures and safety requirements 2.2 Monitor equipment and control points to confirm performance is maintained within specification 2.3 Confirm packages meet specifications 2.4 Maintain stock flow to and from packer process within production requirements 2.5 Identify, rectify and/or report out-of-specification product, process and equipment performance 2.6 Complete size and product changeovers in accordance with batch instructions
3. Shut down packaging process	3.1 Shut down the system safely according to workplace procedures 3.2 Clean and maintain equipment to meet the cleaning schedule and procedural requirements 3.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures 3.4 Record workplace information in the appropriate format according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2004 Operate a beer packaging process	FDFOP2073A Operate a beer packaging process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2004 Operate a beer packaging process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a beer packaging process on at least one occasion, including:

- accessing workplace information to identify production requirements for the packaging process
- selecting, fitting and using personal protective clothing and equipment
- interpreting the production schedule
- confirming supply of necessary materials and services
- confirming packaging equipment status and condition
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- setting up and starting up the process, including the use of process control systems, and adjusting the packagers to product specifications
- monitoring the packaging process and equipment operation to identify out-of-specification results or non-compliance, including:
 - glue seals on cartons
 - incorrect shape
 - materials faults
 - incomplete shrink wrapping

- equipment faults
- services faults
- monitoring supply and flow of materials to and from the packer
- taking corrective action in response to out-of-specification results or non-compliance
- safely accessing, isolating and clearing jams in packaging equipment
- reporting and/or recording corrective action
- replenishing the packing process with raw materials, ingredients and packaging consumables
- verifying that output meets specifications
- implementing size/product changeovers
- sorting, collecting, treating, recycling or disposing of waste
- shutting down packaging equipment in response to emergency situation
- shutting down packaging equipment in response to routine shutdown requirements
- preparing packaging equipment for cleaning
- maintaining work area to meet housekeeping standards
- recording workplace information
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the packaging process
- relationship between the packaging process, fillers, labellers, other packaging equipment and palletisers, including stages that occur during filling and packaging
- requirements of the packaging process and types of packers
- microbiological considerations in filling and packaging beer
- effect of packaging on the end product
- process specifications, procedures and operating parameters of the beer packaging process
- significance and methods of monitoring control points within the packaging process
- beer packaging equipment and instrumentation components, purpose and operation
- services used in the packaging process
- common causes of variation in equipment and corrective action required
- work health and safety hazards and controls relevant to the beer packaging process
- procedures and responsibility for reporting problems
- shutdown and cleaning requirements associated with changeovers, and types of shutdowns
- waste handling requirements and procedures relevant to the beer packaging process
- recording requirements and procedures, including down time
- cleaning and sanitation procedures for the beer packaging process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - beer packaging equipment
 - services
 - stock required for the beer packaging process
 - stock flow system
 - related work areas and communication system
 - relevant work health and safety clothing and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety and environmental requirements
 - production schedule and batch instructions
 - material safety data sheets, where appropriate
 - specifications, control points and filling parameters
 - routine preventative maintenance schedule
 - cleaning schedule
 - sampling and testing schedules
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2005 Operate a beer filling process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a beer filling process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a beer filling process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the filler process for operation	1.1 Identify and check filling requirements 1.2 Confirm availability of required materials and services to meet

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	filling requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit 1.4 Conduct pre-start checks of equipment, including checking that hygiene and sanitation standards are met and all safety guards are in place 1.5 Set the beer filling process to meet production requirements
2. Operate and monitor the beverage filling process	2.1 Start up the beer filler process according to work health and safety and operating requirements 2.2 Monitor equipment and control points to confirm performance is maintained within specification 2.3 Check beer containers (cans, kegs and bottles) against production order and container specifications 2.4 Maintain stock flow to and from filler process within production requirements 2.5 Identify, rectify and/or report out-of-specification product, process and equipment performance 2.6 Complete size and product changeovers in accordance with batch instructions
3. Shut down filler	3.1 Shut down filler process safely according to operating procedures 3.2 Clean and maintain equipment to meet cleaning schedules and procedural requirements 3.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures 3.4 Record workplace information in the appropriate format according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2005 Operate a beer filling process	FDFOP2072A Operate a beer filling process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2005 Operate a beer filling process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a beer filling process on at least one occasion, including:

- accessing workplace information to identify production requirements for the beverage filling process
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- selecting, fitting and using personal protective clothing and equipment
- setting up and starting up the process, including the use of process control systems, and adjusting the filler to product specifications
- identifying keg, can and bottle sizes relevant to beer filling operation
- identifying types of beer products relevant to beer filling operation
- interpreting the production schedule
- confirming supply of necessary materials and services to the filler
- confirming equipment status and condition
- monitoring the beverage filling process and equipment operation to identify out-of-specification results or non-compliance, including:
 - flow rates/quantity
 - broken bottles

- faulty kegs or cans
- contaminated product
- materials faults
- equipment faults
- services faults
- monitoring supply and flow of materials to and from the filler
- safely accessing, isolating and clearing jams in filling machine
- taking corrective action in response to out-of-specification results or non-compliance
- reporting and/or recording corrective action
- replenishing the filling process with raw materials, ingredients and packaging consumables
- verifying that output meets specifications
- implementing size and product changeovers
- sorting, collecting, treating, recycling or disposing of waste
- shutting down beverage filling equipment in response to emergency situation
- shutting down beverage filling equipment in response to routine shutdown requirements
- preparing beverage filling equipment for cleaning
- maintaining work area to meet housekeeping standards
- recording workplace information
- collecting samples and conducting tests according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the beverage filling process
- relationship between the filling process, bright beer and other brew house operations as well as other packaging operations
- stages that occur during filling and packaging
- requirements of the filling process
- types of fillers used in the beer filling process
- aseptic requirements for preparing containers
- microbiological considerations in filling and packaging beer
- effect of filling on the end product
- quality characteristics to be identified for the beer filling process
- process specifications, procedures and operating parameters
- significance and methods of monitoring control points within the beverage filling process
- equipment and instrumentation components, purpose and operation of the beer filling process
- services used in the filling process

- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the beer filling process
- workplace procedures and responsibility for reporting problems
- shutdown and cleaning requirements associated with changeovers, and types of shutdowns
- waste handling requirements and procedures relevant to the beer filling process
- recording requirements and procedures, including down time
- environmental issues and controls relevant to the filling and sealing process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- aseptic filling and sealing requirements
- cleaning and sanitation procedures required for the beer filling process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - beer filling equipment
 - services as required
 - stock required for the beer filling process
 - stock flow system
 - related work areas and communication system
 - routine preventative maintenance schedule as required
 - cleaning schedule as required
 - sampling and testing schedules as required
- specifications:
 - work procedures, including advice on safe work practices, food safety and environmental requirements
 - production schedule, batch instructions
 - material safety sheets, where appropriate
 - specifications, control points and filling parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2006 Operate a bulk dry goods transfer process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to receive and transfer bulk (dry) raw materials to storage areas.

The unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing production environment. It typically applies to workers responsible for the operation and monitoring of a dry ingredients transfer process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for bulk materials transfer work	1.1 Read or listen to work instructions from supervisor and clarify where required 1.2 Identify work health and safety hazards for the bulk dry goods

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	transfer process and inform supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit according to work health and safety requirements 1.4 Identify bulk storage locations, ingredient and materials holdings and capacities 1.5 Confirm actual to recorded holding levels
2. Check and prepare bulk materials transfer equipment and process for operation	2.1 Confirm the transfer system equipment is ready for use 2.2 Select transfer equipment settings and operating parameters to meet safety and transfer requirements 2.3 Carry out checks and tests and follow other materials and product clearance procedures prior to transfer 2.4 Establish priorities for materials transfer to match intakes and transfers to storage capacity and production requirements
3. Transfer bulk materials	3.1 Start and operate the transfer process according to work health and safety and operating requirements 3.2 Monitor the transfer process to confirm correct location selection, quantities and equipment settings 3.3 Transfer bulk dry materials and product to the required location or storage facility 3.4 Maintain a clean and tidy workplace according to work health and safety and food safety procedures 3.5 Maintain workplace records in required format 3.6 Conduct work according to workplace environmental guidelines
4. Complete transfer operations	4.1 Select equipment settings to complete transfer operation 4.2 Purge in-flight product from lines according to workplace procedures 4.3 Clean and prepare equipment for further transfer 4.4 Record information on the transfer operation in required format 4.5 Identify and report maintenance requirements according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	Interpret system process control data, capacities, quantities and product levels
Reading	- Identify product and other transfer requirements from basic order forms - Read system information from control screens - Identify workplace procedures
Writing	Record data and observations on written and digital media
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures - Take steps to develop skills and knowledge of transfer process
Interact with others	- Communicate and report operational and safety information to relevant persons - Select and use appropriate terminology when communicating with personnel and customers - Participate in conversations relevant to role by responding and explaining as required
Get the work done	- Make routine decisions relating to transfer process - Implement standard solutions and responses to familiar problems and incidents - Recognise and respond to non-conforming product - Use digital technologies including process control screens and systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2006 Operate a bulk dry goods transfer process	FDFOP2006A Operate a bulk dry goods transfer process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2006 Operate a bulk dry goods transfer process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has received and transferred bulk (dry) raw materials to storage areas on at least one occasion, including:

- accessing workplace information relating to materials transfer requirements and priorities
- selecting, fitting and using personal protective equipment (PPE)
- using workplace records and systems to confirm storage facilities and capacities and determine appropriate routing of materials received (this typically involves use of computer-based systems) and, where required, verifying by physically inspecting storage facilities
- planning and sequencing transfer process to meet storage capacity and production requirements
- preparing equipment for materials transfer, such as confirming that equipment is clean, lines are purged, isolation or lock-outs are cancelled as required, any scheduled maintenance has been completed and safety guards/equipment are correctly positioned
- carrying out procedures to confirm bulk materials meet quality requirements as required by transfer process, such as conducting tests or getting clearance documentation from laboratory/quality personnel
- operating and monitoring transfer process to confirm that correct quantities are transferred at the required times, to the required locations
- locating emergency stop functions on equipment
- responding to and/or reporting equipment failure within level of responsibility
- responding to and/or reporting evidence that bulk materials do not meet quality requirements
- completing the transfer operations, such as purging lines and selecting appropriate equipment/system settings
- completing records of product/materials transfer as required
- maintaining work area to meet housekeeping standards

- using process control and scheduling systems, screens and panels according to enterprise procedures
- following relevant work health and safety requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- bulk dry materials storage layout, capacities and related management systems
- basic operating principles of equipment, such as the system of sensors, valves, pipework and related equipment that controls the transfer of bulk dry materials, equipment operating capacity and the status and purpose of guards
- planning and scheduling systems and responsibilities to prioritise materials transfer processes, including the characteristics of materials received and related storage requirements, production requirements and storage capacities
- signs and symptoms of faulty equipment and early warning signs of potential problems
- operating parameters and corrective action required where operation is outside specified operating parameters
- work health and safety hazards and controls, including the risk of spontaneous combustion, and dust control
- isolation, lock-out and tag-out procedures and responsibilities
- product inspection procedures within level of responsibility, including types of pest infestation and common contamination relevant to dry materials transferred
- procedures for separating and handling non-conforming or unacceptable product
- clearance procedures, such as relevant test methods and action required if results are not within specification or clearance is not provided
- contamination risks and controls, including cross-contamination risks, product compatibility and storage requirements
- environmental issues associated with dry goods handling and storage
- recording requirements and procedures for dry good handling and storage
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - storage locations, capacities and bulk receipt equipment capacity and operating parameters
 - bulk transfer system, equipment and services

- bulk materials (dry)
- receival schedules and sequencing systems
- sampling schedules and test procedures and equipment as required
- documentation and recording requirements and procedures
- cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - work roles and responsibilities, training and career information.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2007 Work in a freezer storage area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to enter and work in a freezer storage or cold room area.

This unit applies to individuals working in in a food processing environment who work under general supervision and exercise limited autonomy, with some accountability for their own work.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to enter a freezer storage environment	1.1 Read or listen to work instructions from supervisor and clarify where required 1.2 Identify work health and safety hazards for working in a freezer

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	storage area and inform supervisor 1.3 Wear appropriate personal protective equipment according to work health and safety requirements 1.4 Confirm clothing and footwear are correctly fitted prior to entering a freezer 1.5 Carry out checks and inspections of freezer storage area
2. Identify and monitor equipment operation in a freezer storage environment	2.1 Identify the effects of freezing temperatures on equipment 2.2 Monitor equipment when in use in a freezer to ensure effective functioning
3. Store frozen product safely	3.1 Identify handling requirements for frozen product according to workplace procedures 3.2 Handle frozen product safely according to workplace requirements
4. Respond to emergencies	4.1 Identify signs and symptoms of exposure to low temperatures 4.2 Take appropriate action to minimise effects of exposure on self and others

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Identify product weights for manual lifting purposes - Interpret storeroom temperature gauges - Count product quantities - Interpret freezing rates for products
Reading	- Identify product types - Interpret workplace procedures and safety information
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and

Skill	Description
	- operating procedures - Take steps to develop skills and knowledge
Interact with others	- Communicate and report operational and safety information to relevant persons - Select and use appropriate terminology when communicating with others - Participate in conversations relevant to role by responding and explaining as required
Get the work done	- Operate manual load shifting equipment - Make routine decisions relating to storeroom and equipment cleanliness and condition, and product suitability - Solve familiar and generally predictable problems within workplace guidelines - Recognise and respond to non-conforming product - Use digital technologies, including temperature gauges

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2007 Work in a freezer storage area	FDFOP2007A Work in a freezer storage area	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2007 Work in a freezer storage area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has prepared to enter and worked in a freezer storage area on at least one occasion, including:

- locating and fitting appropriate PPE
- following procedures to enter and work in a freezer environment to ensure safety of self and others, including carrying out relevant checks and inspections prior to entry as required by workplace procedures
- following procedures to handle product to avoid product damage
- monitoring operating performance of equipment used in the freezer and identifying signs of unsafe or unfit operation
- conducting work in a manner appropriate to minimising risk of contamination
- maintain work area to meet housekeeping standards
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and conditions required in a freezer storage environment, including how temperature parameters are maintained in the freezer/cold room
- safety requirements and hazards associated with entering and working in a freezer storage/cold room area, including required PPE, limitations of PPE, and maximum work duration
- symptoms associated with hypothermia and action to take if these occur
- the effects of freezer/cold room temperatures and frozen condensation on equipment used in a freezer/cold room but designed for room temperature operation, including symptoms that equipment is unsafe or unfit for use

- effects of room temperatures on equipment using hydraulic oils designed for freezer/cold room temperatures
- typical freezing rates for product handled, including products stacked on pallets
- handling requirements for moving pallets of frozen product and how this differs from moving pallets of fresh product
- the differences in product stability of pallets loaded with fresh compared with frozen product, and related wrapping requirements
- the effect of freezing on product packaging and related handling requirements
- cleaning requirements for a freezer storage area.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - freezer storage/cold room area
 - stock to be held in frozen storage
- specifications:
 - work roles and responsibilities, training and career information
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2008 Operate a bulk liquid transfer process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to receive and load out bulk liquid product or raw materials.

This unit applies to individuals transferring bulk liquid product and materials from tankers and between storage and production storage facilities.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for bulk materials transfer work	1.1 Read or listen to work instructions from supervisor and clarify where required 1.2 Identify work health and safety hazards for the bulk liquid transfer process and inform supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Wear appropriate personal protective equipment and ensure correct fit according to work health and safety requirements 1.4 Identify tank locations, and product and materials holdings and capacities 1.5 Confirm actual-to-recorded holding levels
2. Prepare bulk liquid transfer equipment and process for operation	2.1 Inspect condition of tank farm and related equipment and identify and report maintenance requirements 2.2 Select transfer equipment settings and operating parameters to meet safety and transfer requirements 2.3 Carry out checks and tests, and follow other materials and product clearance procedures prior to transfer 2.4 Establish the priorities for materials transfer to match intakes and transfers to storage capacity and production requirements
3. Transfer bulk liquid materials	3.1 Start and operate the transfer process according to work health and safety and operating requirements 3.2 Monitor the transfer process to confirm correct location selection, quantities and equipment settings 3.3 Transfer bulk liquid materials and product to the required location or storage facility 3.4 Maintain a clean and tidy workplace according to work health and safety and food safety procedures 3.5 Maintain workplace records in required format 3.6 Conduct work according to workplace environmental guidelines
4. Complete transfer operations	4.1 Position valves and related equipment settings to complete transfer operation 4.2 Purge product and materials from lines according to workplace procedures 4.3 Clean and prepare equipment for further transfer 4.4 Record information on the transfer operation in required format 4.5 Identify and report maintenance activities according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	Interpret system process control data, capacities, quantities and product levels
Reading	- Identify product and other transfer requirements from basic order forms - Read system information from control screens - Identify workplace procedures
Writing	Record data and observations on written and digital media
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures - Take steps to develop skills and knowledge of transfer process
Interact with others	- Communicate and report operational and safety information to relevant persons - Select and use appropriate terminology when communicating with personnel and customers - Participate in conversations relevant to role by responding and explaining as required
Get the work done	- Make routine decisions relating to transfer process - Implement standard solutions and responses to familiar problems and incidents - Recognise and respond to non-conforming product - Use digital technologies including process control screens and systems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2008 Operate a bulk liquid transfer process	FDFOP2008A Operate a bulk liquid transfer process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2008 Operate a bulk liquid transfer process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has received and loaded out bulk liquid product or raw materials on at least one occasion, including:

- accessing workplace information relating to materials transfer requirements
- selecting, fitting and using personal protection equipment
- inspecting equipment for signs of wear, including visual inspections to detect leaks, listening for unusual noises and/or vibrations in pumps, and checking gauges and meters
- using workplace records and systems to confirm tank holdings and capacities and determining appropriate source/destination holding facilities, including verifying by physically inspecting storage facilities and checking materials/product compatibility
- planning and sequencing transfer process to meet storage capacity and production requirements
- preparing equipment for materials transfer, including confirming that equipment is clean, lines are purged, isolation or lock-outs are cancelled as required, any scheduled maintenance has been completed, and safety guards/equipment are correctly positioned
- carrying out procedures to confirm liquid bulk product/materials meet quality requirements
- operating and monitoring transfer process to confirm that correct quantities are transferred at the required times, to the required locations, including monitoring pump loads and flow rates, and filter/strainer condition
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- completing transfer operations, including purging lines and selecting appropriate equipment/system settings
- completing records of product/materials transfer as required
- maintaining work area to meet housekeeping standards
- using process control and scheduling systems, screens and panels according to enterprise procedures

- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- bulk liquid materials storage facilities layout and related management systems
- basic operating principles of the system and equipment used, including the features of the bulk liquid handling system
- equipment used, including sensors, valves, pumps, pipework and other related equipment that controls the flow and transfer of bulk liquid materials, equipment operating capacity and the status and purpose of guards
- planning and scheduling systems and responsibilities to prioritise materials transfer processes, including characteristics of materials received and related storage requirements, production requirements and storage capacities
- signs and symptoms of faulty equipment and early warning signs of potential problems
- operating parameters and corrective action required where operation is outside specified operating parameters
- work health and safety hazards and controls, including emergency procedures to respond to hazardous situations
- product inspection procedures within level of responsibility
- clearance procedures, including relevant test methods and action required if results are not within specification or clearance is not provided
- contamination risks and controls, including cross-contamination risks, product compatibility and storage requirements
- isolation, lock-out and tag-out procedures and responsibilities
- environmental issues associated with bulk liquid materials transfer, including consequences of spills and appropriate control/containment procedures
- recording requirements and procedures for the bulk liquid transfer process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- workplace cleaning procedures required for the bulk liquid transfer process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - bulk transfer system, equipment and services
 - bulk materials (liquid)
 - receipt schedules and sequencing systems

- sampling schedules and test procedures and equipment as required
- documentation and recording requirements and procedures
- cleaning procedures, materials and equipment
- specifications:
 - work roles and responsibilities, training and career information
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - storage locations, capacities and bulk receipt equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2009 Load and unload tankers

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare, load and unload transport tankers with bulk product.

This unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare transport tankers for loading	1.1 Read or listen to work instructions from supervisor and clarify where needed 1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Check the loading schedule to confirm loading requirements 1.5 Confirm that transfer equipment is in operational condition 1.6 Select transfer equipment settings and operating parameters to meet safety and loading requirements 1.7 Locate bulk materials to confirm type, quantity available and clearance for loading 1.8 Confirm priorities for loading to meet delivery requirements
2. Prepare to unload transport tankers	2.1 Check that receivals documentation confirms material type and quantities 2.2 Clear materials for unloading according to workplace procedures and safety requirements 2.3 Identify bulk storage locations, holdings and capacities 2.4 Confirm actual-to-recorded holding levels 2.5 Confirm transfer equipment is in operational condition 2.6 Confirm priorities for unloading to meet delivery requirements
3. Operate and monitor the tanker loading and unloading process	3.1 Start and operate the tanker loading process according to work health and safety and operating procedures 3.2 Monitor equipment to confirm load transfer to correct tanker in correct quantities 3.3 Identify and report variations in equipment operation 3.4 Maintain a clean and tidy workplace according to work health and safety procedures 3.5 Maintain workplace records according to workplace procedures 3.6 Conduct work according to workplace environmental guidelines
4. Complete loading operations	4.1 Select equipment settings to complete loading operation 4.2 Purge in-flight product from lines 4.3 Clean equipment and prepare for further loading according to work health and safety and food safety procedures 4.4 Record information on the loading operation according to workplace procedures 4.5 Identify and report maintenance requirements according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	Interpret capacities, quantities and product levels
Reading	Locate information relevant to product and other loading requirements
Writing	Record data and observations on written and digital media
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures
Interact with others	Communicate and report operational and safety information to relevant persons
Get the work done	- Make routine decisions relating to loading and unloading process - Recognise and respond to non-conforming product and equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2009 Load and unload tankers	FDFOP2009A Load and unload tankers	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2009 Load and unload tankers

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has loaded and unloaded tankers on at least one occasion, including:

- accessing workplace information relating to loading/unloading requirements
- selecting, fitting and using personal protective equipment
- inspecting loading/unloading equipment for signs of wear
- confirming that tankers are in suitable condition for loading
- checking receivals/despatch documentation to confirm material types, quantities and transfer requirements
- confirming that bulk product/materials meet quality requirements for loading/unloading
- using workplace records and systems to confirm storage holdings and capacities and source/destination for loads
- planning and sequencing loading/unloading to meet delivery requirements/storage capacity and production requirements
- preparing transfer equipment for use
- operating and monitoring the loading/unloading process to confirm that correct quantities are transferred at the required times, to the required locations
- responding to and/or reporting equipment failure within level of responsibility
- completing transfer operations
- completing records of product/materials transfer
- maintaining work area to meet housekeeping standards
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- bulk storage facilities layout and related management systems
- basic operating principles of the system and equipment used, including the features of the tanker loading/unloading and materials transfer systems
- equipment that controls the flow and transfer of bulk materials, equipment operating capacity and the status and purpose of guards
- tanker types and capacities
- planning and scheduling systems and responsibilities to prioritise loading and unloading processes, including the characteristics of materials received and related storage requirements, production requirements and storage capacities
- signs and symptoms of faulty equipment and early warning signs of potential problems including leaks, unusual noises and/or vibrations in pumps
- operating parameters and corrective action required where operation is outside specified operating parameters
- product inspection and procedures within level of responsibility
- steps in preparing transfer equipment for use, including confirming that equipment is clean, lines are purged, isolation or lock-outs are cancelled as required, and any scheduled maintenance has been completed
- steps in confirming that tankers are in suitable condition for loading, including checking cleaning records and confirming that any scheduled maintenance has been carried out
- steps in confirming that correct quantities are transferred at the required times, to the required locations, including monitoring pump loads, flow rates and filter/strainer condition
- clearance procedures, including relevant test methods and action required if results are not within specification or clearance is not provided
- work health and safety hazards and controls, including emergency procedures to respond to hazardous situations
- when and how to use emergency stop functions on equipment
- contamination risks and controls, including cross-contamination risks, product compatibility and storage requirements
- isolation, lock-out and tag-out procedures and responsibilities
- environmental issues associated with bulk liquid materials transfer, including consequences of spills and appropriate control/containment procedures
- recording requirements and procedures, including related receivals and despatch documentation
- cleaning procedures for loading and unloading tankers.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - loading/unloading schedules and related receivals and/or despatch documentation

- tankers, storage facilities, materials transfer equipment and related equipment and services
- materials for loading/unloading
- cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information about equipment capacity and operating parameters and tanker types and capacities
 - loading/unloading information recording system and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2010 Work with temperature controlled stock

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to store and retrieve temperature controlled stock from appropriate storage facilities.

This unit applies to individuals who work in controlled temperature environments under general supervision and exercise limited autonomy with some accountability for their own work.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Store stock to meet temperature control requirements	1.1 Read or listen to work instructions from supervisor and clarify where needed 1.2 Identify work health and safety hazards and tell supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Identify goods requiring temperature control according to workplace requirements 1.5 Locate goods in correct storage areas to meet storage temperature, stores handling and stock rotation requirements 1.6 Record stores information according to workplace procedures
2. Monitor and maintain temperature of stock within specifications	2.1 Monitor stock temperature to confirm temperature is within specified limits 2.2 Monitor storage areas to confirm temperature is within storage zone limits 2.3 Monitor residence time in temperature controlled stores to meet stock control requirements 2.4 Identify and report out-of-specification storage temperatures and take corrective action according to workplace procedures
3. Transfer temperature controlled stock	3.1 Handle and transfer goods to maintain temperature control and meet stock rotation requirements according to work health and safety and food safety requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Identify stock weights and quantities - Read instrumentation gauges
Reading	- Identify and locate stock - Identify requirements from basic order forms - Interpret workplace procedures and specifications
Writing	Complete records of stock receipt and transfer
Navigate the world of	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own

Skill	Description
work	- role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures - Take steps to develop skills and knowledge of stock
Interact with others	- Communicate and report operational and safety information to relevant persons - Select and use appropriate terminology when communicating with personnel - Participate in conversations relevant to role by responding and explaining as required
Get the work done	- Make routine decisions relating to freshness and handling of stock - Recognise and respond to non-conforming stock - Use digital technologies including thermometers and temperature probes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2010 Work with temperature controlled stock	FDFOP2010A Work with temperature controlled stock	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2010 Work with temperature controlled stock

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has worked with temperature controlled stock on at least one occasion, including:

- accessing workplace information to determine stock handling and storage requirements
- identifying storage requirements, including temperature limits, minimum duration at given temperatures, and segregation and co-storage requirements
- identifying temperature controlled storage facilities and temperature zones available
- selecting, fitting and using PPE
- using materials handling equipment in a temperature controlled environment as required to undertake work functions
- following procedures to measure core and surface temperature of stock
- reading instrumentation
- identifying and reporting out-of-specification temperatures in stock and storage facilities
- taking corrective action in response to out-of-specification temperatures, including implementation of procedures to segregate damaged or potentially unsafe stock
- completing records of stock receipt and transfer as required
- maintaining work area to meet workplace cleaning standards
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- work health and safety hazards and controls, including the purpose and limitations of PPE
- temperature controlled storage facilities and capacities available in the work area

- temperature control requirements of stock handled in the work area, including acceptable temperature ranges and consequences of failing to meet these ranges and, where required, requirements for gradual temperature change
- stock handling procedures for receiving and locating stock within a store, including stock rotation and procedures for identifying, segregating and disposing of damaged or potentially unsafe stock
- stock handling procedures for transferring temperature controlled stock from a temperature controlled environment, including maximum duration stock can be held outside a controlled environment
- food safety and quality consequences of stock temperature control requirements not being met
- monitoring procedures and instrumentation, including use of thermometers or other temperature measuring instrumentation
- notification, recording and reporting requirements for temperature controlled stock
- operating procedures for goods handling equipment as required
- workplace cleaning standards for the work area
- recording requirements and procedures for working with temperature controlled stock.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - controlled temperature storage facilities
 - stock requiring storage
 - load shifting equipment as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - temperature storage specifications
 - stock information recording system and procedures
 - stock handling and rotation systems.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2011 Identify key stages and beer production equipment in a brewery

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to identify key stages and beer production equipment in a brewery.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Recognise locations and equipment in the brewery for each stage of the brewing process	1.1 Identify location for each beer production stage 1.2 Identify major equipment and equipment function for each beer production stage
2. Identify key information for each beer	2.1 Locate workplace information for each production stage 2.2 Confirm work health and safety policy and procedures appropriate

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
production stage	for the workplace and each production stage 2.3 Confirm supervisor or key resource person for each location
3. Identify workplace objectives, products and procedures	3.1 Identify workplace objectives and procedures 3.2 Identify products produced and other services provided by the workplace 3.3 Locate key support functions and explain their contribution to product range and quality 3.4 Recognise key responsibilities of own section or function 3.5 Distinguish work team roles and responsibilities

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret and comprehend workplace information relevant to job role
Navigate the world of work	Identify responsibilities associated with own role
Interact with others	Use modes of communication suitable to purpose to confirm understanding

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2011 Identify key stages and beer production equipment in a	FDFOP2071A Identify key stages and beer production equipment in a	Updated to meet Standards for Training Packages	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
brewery	brewery		

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2011 Identify key stages and beer production equipment in a brewery

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has identified key stages and beer production equipment in at least one brewery, including:

- identifying the stages in the brewing process and matching these to different locations within the brewery or company
- locating and explaining key functions of the work site, including:
 - key people
 - specific work areas and their functions
 - how functions relate to each other
- identifying how each function or process contributes to workplace objectives and product quality
- identifying own workplace, key equipment and site layout, roles and responsibilities
- identifying workplace information sources, and updating and accessing requirements and procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace objectives as they relate to beer production
- workplace product and services range
- key production sites of the brewery
- key functions and processes within the workplace
- how each function or process contributes to product and services quality
- own workplace and site layout, roles and responsibilities
- features and purpose of key equipment and work areas
- key people's roles and responsibilities within the brewery

- reporting procedures and processes for key stages and beer production equipment in a brewery
- workplace information sources, and updating and accessing of requirements and procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- specifications:
 - work procedures, instructions and general workplace information

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2012 Maintain food safety when loading, unloading and transporting food

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to maintain food safety when loading and transporting temperature-sensitive ingredients and products.

This unit applies to loading, unloading and transport activities where the transport operator does not have direct physical contact with food. Where food is handled directly by the transport operator, the relevant food handling unit also applies.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to transport food	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that food storage vehicles, containers and receptacles are appropriate for use 1.5 Prepare food storage vehicles and containers and receptacles for use according to workplace procedures and safety and food safety requirements 1.6 Load and secure food to meet transportation and temperature control requirements according to workplace procedures and food safety requirements 1.7 Follow hand washing and disinfecting procedures according to food safety requirements
2. Load, unload and transport food safely	2.1 Monitor food safety control measures to ensure that food safety is maintained during transport 2.2 Report incidents where food safety control requirements are not met and take corrective action as directed 2.3 Unload food according to workplace procedures and transportation and temperature control requirements 2.4 Record food safety information according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Assemble and sort product - Count accurately - Read a thermometer and temperature charts - Weigh product
Reading	- Check cleaning records - Interpret and follow food safety and work health and safety requirements

Skill	Description
Navigate the world of work	• Apply workplace procedures relevant to own responsibilities • Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures • Take steps to develop skills and knowledge of temperature controlled food products
Interact with others	• Communicate and report operational and safety information to relevant persons • Select and use appropriate terminology when communicating with personnel • Participate in conversations relevant to role by responding and explaining as required
Get the work done	• Make routine decisions relating to temperature, freshness and handling of product • Recognise and respond to non-conforming product • Use digital technologies including electronic scales

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2012 Maintain food safety when loading, unloading and transporting food	FDFOP2012A Maintain food safety when loading, unloading and transporting food	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2012 Maintain food safety when loading, unloading and transporting food

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has maintained food safety when loading, unloading and transporting food on at least one occasion, including:

- accessing workplace information to determine food handling and transport requirements
- selecting, fitting and using PPE
- confirming that the vehicle and associated equipment are appropriate and ready for use, including confirming that vehicle type is capable of maintaining the required temperature range for product
- preparing transport containers (this will vary depending on the type of food and transport method), such as checking cleaning records and, where required, confirming product compatibility to ascertain that appropriate level of cleaning has occurred
- preparing the storage/holding environment as required, including confirming that temperature parameters for the loading and unloading areas are met
- following procedures to load/unload food to ensure that materials/product is loaded/unloaded in correct sequence and configuration and that food cannot become contaminated by being located in proximity to other food or non-food items that can cause contamination (osmosis)
- monitoring temperature parameters and related food safety control points before, during and after transporting food, and recording information in the required format
- taking appropriate corrective action in response to failure to meet temperature parameters or other food safety requirements as required by workplace procedures
- cleaning and sanitising food containers according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- work health and safety hazards and controls, including the purpose and limitations of protective clothing and equipment
- food safety control points in the loading/unloading and transportation of food materials and product, and related methods of control
- characteristics of food transported and related transport environment requirements
- microbiological, physical and chemical hazards that can occur when loading, transporting and unloading food, appropriate to nature and method of food transported, including the types of hazards likely to occur, the conditions under which they occur, and possible consequences
- methods and procedures used to control food safety hazards (this depends on the type of controls and equipment used), including the purpose and operation of equipment procedures in place to maintain food safety and workplace records, such as temperature control charts and cleaning and sanitation records
- procedures used to confirm that transportation and related food safety equipment is appropriate for use and operational, such as equipment capacity to maintain a given temperature environment appropriate to the food product
- cleaning and sanitation requirements for maintaining food safety when loading, unloading and transporting food
- potential for cross-contamination resulting from location in proximity to other food or non-food items that are transported, where contamination by osmosis is a possibility.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - workplace information, including temperature charts and cleaning records
 - food storage vehicles, containers and receptacles
 - food materials and product to be loaded/unloaded and transported
- specifications:
 - work procedures relevant to loading/unloading and transportation, including advice on required temperature parameters to be maintained
 - food safety information
 - loading/unloading and transport advice/schedules
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2013 Operate a bright beer tank process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a bright beer tank process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a bright beer tank process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPOPR2011 Identify key stages and beer production equipment in a brewery.

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare bright beer tank process for operation	1.1 Confirm beer is available to meet production requirements 1.2 Confirm availability of services according to workplace

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	procedures and requirements 1.3 Check equipment to confirm readiness for use according to workplace procedures 1.4 Wear appropriate personal protective clothing and ensure correct fit 1.5 Carry out pre-start checks according to operator instructions
2. Operate and monitor bright beer tanks and equipment	2.1 Start up the system and receive beer from filtration process according to work health and safety and operating procedures 2.2 Monitor equipment and control points, adjusting temperature, pressure and carbon dioxide to confirm performance is maintained within specification 2.3 Confirm system and sub-system outputs meet specification 2.4 Undertake testing to ensure yeast effectiveness and freedom from bacterial contamination 2.5 Transfer bright beer to filling and packaging stations according to workplace procedures 2.6 Record production and other workplace information according to workplace procedures
3. Shut down the system	3.1 Shut down the system safely according to operating procedures 3.2 Clean and maintain equipment to meet workplace cleaning schedule and procedural requirements 3.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures according to workplace procedures 3.4 Record workplace information according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret workplace and standard operating procedures relevant to job role

Skill	Description
	Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2013 Operate a bright beer tank process	FDFOP2070A Operate a bright beer tank process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2013 Operate a bright beer tank process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a bright beer tank process on at least one occasion, including:

- identifying turbulence and undertaking appropriate corrective action
- confirming equipment status, including checking:
 - hygiene and sanitation standards are met
 - all safety guards are in place and equipment is operational
- monitoring for bacteria and quality
- monitoring oxygen and its effect on quality
- monitoring temperature and its effect on quality
- using fobbing equipment correctly to control oxygen and beer quality
- operating vessel transfer equipment
- handling dangerous goods according to procedures
- monitoring control points within the bright beer process
- operating bright beer related equipment
- identifying common causes of variation and undertaking corrective action required
- identifying work health and safety hazards and implementing appropriate action
- selecting, fitting and using personal protective clothing and equipment
- shutting down filtration process and equipment and implementing cleaning requirements associated with changeovers
- recording production and other data according to procedures
- collecting samples and conducting tests according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- maintaining work area to meet workplace cleaning procedures and standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and principles of bright beer procedures
- consequences of turbulence and the procedures to avoid it
- effect of bacteria, oxygen and temperature on quality
- fobbing and its effect on quality
- process specifications, procedures and operating parameters
- significance and methods of monitoring control points within the bright beer process
- beer tank processing equipment and instrumentation components, purpose and operation
- common causes of variation and corrective action required, including procedures and responsibilities for reporting problems
- work health and safety hazards and controls relevant to bright beer process, including procedures for handling dangerous goods
- environmental issues and controls, including waste handling requirements and procedures
- shutdown and cleaning requirements associated with changeovers, and types of shutdown
- recording requirements and procedures for operating a bright beer tank process
- cleaning and sanitation procedures for a bright beer tank process
- sampling and testing procedures for a bright beer tank process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - equipment used in the bright beer process
 - personal protective clothing and equipment
 - relevant hazard control equipment
 - storage areas for hazardous goods
 - manual handling equipment
- specifications:
 - standard operating procedures and related advice on specific safe work practices, policies and codes of practice relating to work health and safety
 - emergency and/or evacuation procedures for the range of potential hazards.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2014 Participate in sensory analyses

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to participate in sensory analyses of food products and ingredients.

This unit applies to individuals who work in the food processing industry under general supervision and with limited autonomy. It covers analyses of food product or ingredients using taste, texture, appearance and smell.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to conduct sensory analysis	1.1 Read or listen to work instructions from supervisor and clarify where needed 1.2 Identify work health and safety hazards and inform supervisor 1.3 Wear appropriate personal protective equipment and ensure

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	correct fit 1.4 Ensure that personal conduct and the test environment are appropriate to conducting sensory analysis
2. Conduct sensory analysis	2.1 Ensure that samples are available for analysis 2.2 Use the correct method and criteria for sampling according to workplace procedures and requirements 2.3 Analyse samples using analysis criteria 2.4 Identify and report defects or abnormalities in sample 2.5 Record results according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	Calculate sample quantities
Reading	Interpret standard operating procedures (SOPs), specifications and sampling plans
Writing	Use paper-based and electronic media to record sampling results
Navigate the world of work	Apply workplace procedures relevant to own responsibilities
Interact with others	- Communicate and report sampling information to relevant persons - Select and use appropriate terminology when communicating with and explaining information to others
Get the work done	- Make routine decisions about sample conformance - Solve familiar and generally predictable problems within workplace guidelines - Use sampling tools and equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2014 Participate in sensory analyses	FDFOP2014A Participate in sensory analyses	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2014 Participate in sensory analyses

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has participated in sensory analyses of food products and ingredients on at least one occasion, including:

- accessing and interpreting sensory analysis schedule and analysis criteria to identify requirements
- selecting, fitting and using personal protective equipment
- ensuring that personal conduct does not jeopardise analytical ability
- confirming that samples are available and in an appropriate condition for analysis
- following procedures to analyse samples provided
- recording and/or reporting results of analysis
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- work health and safety hazards and controls, including the purpose and limitations of protective clothing and equipment
- principles of sensory analysis, including attributes that can be detected by taste and smell, how these different tastes are detected, and an understanding of attributes detected by mouth feel and appearance
- sensory analysis system and procedures
- specific criteria used to evaluate material/product samples and the associated descriptions
- sample preparation requirements, including the effect of sample temperature on sensory analysis
- the effect of personal conduct on analytical ability, including stimuli and conditions that can dull sensitivity
- requirements of the environment appropriate to conducting sensory analyses

- the components of material/product sampled that contribute to flavour, aroma, appearance and texture
- the likely causes of variation in results, including typical variation that can occur in the material/product and how these occur, as well as how the method of analysis, environment and state of individual participants can affect the outcome
- procedures and responsibility for recording and reporting sensory analysis information.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - recording and reporting media
 - product/source material to be sampled
- specifications:
 - documentation, including specifications, work instruction, sensory analysis criteria and other advice on sampling requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2015 Operate a beer filtration process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a beer filtration process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a beer filtration process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPOPR2011 Identify key stages and beer production equipment in a brewery.

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the filtration process for operation	1.1 Confirm availability of required materials according to operating requirements 1.2 Confirm availability of services according to operating

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit 1.4 Conduct pre-start checks of equipment according to operator instructions, including checking that hygiene and sanitation standards are met 1.5 Set the filtration process to meet production requirements
2. Operate and monitor the beer filtration system	2.1 Start up beer filtration equipment according to operating procedures 2.2 Monitor equipment and control points to confirm performance is maintained within specification 2.3 Undertake blending of beer according to workplace procedures, as part of filtration process 2.4 Confirm system and sub-system outputs meet specifications 2.5 Identify, rectify and/or report out-of-specification product, process and equipment performance 2.6 Record production and other workplace information according to workplace procedures
3. Shut down the filtration system	3.1 Shut down the system safely according to operating procedures 3.2 Clean and maintain equipment to meet the workplace cleaning schedule and procedural requirements 3.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures 3.4 Record workplace information according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret and comprehend information relevant to job role

Skill	Description
Writing	Record operating, routine maintenance and shutdown information in required format
Numeracy	- Monitor and interpret production and process data - Monitor supply and flow of materials to and from the process
Navigate the world of work	Apply workplace procedures and relevant legislative requirements applicable to own role and responsibilities
Get the work done	- Plan and organise resources required to process - Address problems directly related to own role

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2015 Operate a beer filtration process	FDFOP2069A Operate a beer filtration process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2015 Operate a beer filtration process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down at least one beer filtration process, including:

- confirming equipment status, including checking:
 - hygiene and sanitation standards are met
 - all safety guards are in place
 - equipment is operational
 - filter aids, filtration beds and filters
- identifying work health and safety hazards and implementing appropriate action
- selecting, fitting and using personal protective clothing and equipment
- operating filtration equipment according to specifications, procedures and operating parameters
- monitoring control points within the filtration process
- undertaking required corrective action in the event of variations to specification and procedures
- shutting down filtration process and equipment and implementing cleaning requirements associated with changeovers
- applying waste handling requirements and procedures
- maintaining required production records
- maintaining work area to meet hygiene standards
- cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and principles of the filtration process

- relationship between the work production process, the fermentation process, the maturation process and bright beer tanks
- stages and changes that occur during filtration
- purpose of filter aids, filtration beds and filters in the beer production process
- significance and methods of monitoring control points within the filtration process
- beer filtration equipment used, including components, purpose and operation
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the beer filtration process
- environmental issues and controls, including waste handling requirements and procedures
- shutdowns and cleaning requirements associated with changeovers
- recording requirements and procedures for operating a beer filtration process
- cleaning and sanitation procedures for beer filtration equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - relevant hazard control equipment and storage areas for hazardous goods
 - filtration equipment
 - filter aids and stabilising agents
 - workplace information system
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - specifications, control points and parameters for the beer filtration equipment and process
 - beer filtration equipment operating and service manuals
 - record-keeping documents required for the work specified in the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2016 Operate a beer maturation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a beer maturation process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a beer maturation process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, food safety, and environmental regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPOPR2011 Identify key stages and beer production equipment in a brewery

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm maturation requirements according to production requirements 1.2 Confirm clarification requirements, including specifications for

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	any additions and agents 1.3 Confirm materials are available to meet production requirements 1.4 Confirm services as being ready for operation according to workplace procedures and safety and food safety requirements 1.5 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the maturation process for production	2.1 Check equipment to confirm readiness for use according to workplace procedures 2.2 Set the maturation process to meet production requirements 2.3 Carry out pre-start checks according to operator instructions
3. Operate and monitor beer maturation equipment	3.1 Start up, operate, and monitor equipment and control points for variation in operating conditions according to work health and safety and operating procedures 3.2 Confirm system and sub-system outputs meet specification 3.3 Identify, rectify and/or report out-of-specification product, process and equipment performance 3.4 Complete size and product changeovers in accordance with batch instructions 3.5 Record workplace information for the beer maturation process according to workplace procedures
4. Shut down the system	4.1 Shut down the system safely according to operating procedures 4.2 Clean and maintain equipment to meet the workplace cleaning schedule and procedural requirements 4.3 Collect, treat and dispose of or recycle waste generated by both the process and workplace cleaning procedures 4.4 Record workplace information according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2016 Operate a beer maturation process	FDFOP2068A Operate a beer maturation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2016 Operate a beer maturation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a beer maturation process on at least one occasion, including:

- handling dangerous goods according to required procedures
- monitoring control points within the maturation process
- confirming equipment status, including:
 - checking that hygiene and sanitation standards are met
 - checking all safety guards are in place and equipment is operational
- operating equipment and controls to achieve specifications, including:
 - required temperature
 - required concentration of finings and other additions
 - transfers
 - disposal of sediment and other waste
- undertaking corrective action in the event of variation to specification
- identifying work health and safety hazards and implementing appropriate action
- selecting, fitting and using personal protective clothing and equipment
- identifying procedures and responsibilities for reporting and solving problems
- following environmental issues and controls
- shutting down the process and equipment and implementing cleaning requirements associated with changeovers
- using correct waste handling requirements and procedures
- recording production and other data according to procedures
- cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and principles of the beer maturation process
- relationship between the maturation process, the fermentation process and the filtration process
- stages and changes that occur during beer maturation
- requirements of maturation
- purpose of temperature control and cold storage in the beer maturation process
- purpose of protein absorbing agents
- purpose of oxygen scavenging agents
- purpose of tannin absorbing agents
- procedures for vessel transfer
- quality characteristics to be achieved
- process specifications, procedures and operating parameters
- significance and methods of monitoring control points within the maturation process
- beer maturation equipment and instrumentation components, purpose and operation
- common causes of variation and corrective action required
- work health and safety hazards and controls
- environmental issues and controls for process, including waste handling requirements and procedures
- recording requirements and procedures for the beer maturation process
- cleaning and sanitation procedures for a beer maturation process
- purpose of finings in a beer maturation process
- cask maturation process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - equipment, materials and services necessary to the maturation process
 - fermentation tank
 - additions and agents
 - supply and flow of materials to and from the process
 - waste sediment disposal
- specifications:
 - access to workplace information to identify production requirements and beer type for beer maturation process

- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- product/beer-type changeover processes
- reporting and documentation processes and requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2017 Operate a blending, sieving and bagging process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a blending, sieving and bagging process.

This unit applies to individuals who work under general supervision and exercise limited autonomy blending and bagging of dry goods as bulk blends or for use in food service. This process is typically used for the blending and packaging of low-moisture products, including dry flavours and marinades, donut mix, cake mix, bakery ingredients, batters, cheese powders, spice mixes and herb blends.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety, and environmental regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and inform supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that materials are available according to operating requirements 1.5 Identify and confirm workplace cleaning and maintenance requirements and status
2. Prepare the blend, sieve and bagging equipment and process for operation	2.1 Fit and adjust machine components and related attachments to meet safety and operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Load or position materials, ingredients, product and consumables according to operating requirements 2.4 Carry out pre-start checks, adjusting equipment performance according to operator instructions
3. Operate and monitor the blend, sieve and bagging process	3.1 Deliver ingredients to the blender in the required quantities and sequence to meet recipe specifications according to workplace and food safety procedures 3.2 Start, operate and monitor the process for variation in operating conditions according to workplace procedures, including safety requirements 3.3 Monitor the process to confirm that ingredients are blended, sieved and bagged to meet specifications 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Follow and apply workplace cleaning and environmental working procedures
4. Shut down the blend, sieve and bagging process	4.1 Identify the appropriate shutdown procedure, and implement 4.2 Identify and report routine maintenance requirements 4.3 Maintain workplace records in required format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret information relevant to job role
Writing	Record operating, routine maintenance and shutdown information
Numeracy	Monitor and interpret production and process control indicators and data
Navigate the world of work	Apply workplace procedures to own role and responsibilities
Interact with others	- Report operational and safety information in required format - Use suitable modes of communication to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Carry out tasks in correct sequence - Respond to problems directly related to own role according to procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2017 Operate a blending, sieving and bagging process	FDFOP2017A Operate a blending, sieving and bagging process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2017 Operate a blending, sieving and bagging process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a blending, sieving and bagging process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective equipment
- confirming supply of necessary packaging components/consumables, materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring scheduled maintenance has been completed and all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections, as required, to confirm process remains within specification, including:
 - characteristics of blend
 - flow to sieves
 - sieve/screen condition
 - supply of packaging components/consumables
 - integrity of finished seals (stitching or thermal)
- monitoring and regulating the supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- demonstrating batch/product changeovers
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the process, including the method and sequence of ingredient addition required to achieve required blend characteristics
- the purpose of packaging and the properties required of packaging materials used, coding requirements, and related legal requirements, including product weight
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes
- quality characteristics required of process outputs, including packaging quality and seal integrity as required
- effect of variation in inputs, including ingredient quality/condition, packaging components/consumables and/or services, on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems, including sieve or screen damage
- methods used to monitor the process, including monitoring blend characteristics and weights
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures, including product compatibility, cross-contamination risks and associated cleaning requirements
- common causes of variation and corrective action required, including procedures to manage the reprocessing (return to blend) of the first part of the blend to minimise non-conforming output
- work health and safety hazards and controls relevant to the blending, sieving and bagging process

- requirements of different shutdowns as appropriate to the process and workplace production/packaging requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for a blending, sieving and bagging process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - blending, sieving and bagging equipment and services
 - materials to be processed, and packaging components/consumables
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and operating parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2018 Operate a case packing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a secondary packaging process used to form trays or boxes, load and position product, and seal the package.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing packing environment. It typically applies to the worker responsible for applying basic operating principles to the operation and monitoring of a case packing process and associated equipment. Case packers may be configured as side loading, wrap around, drop, or pick and place packers.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the case	1.1 Read or listen to work instructions from supervisor and clarify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
packing equipment and process for operation	where needed 1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment (PPE) and ensure correct fit 1.4 Confirm that packaged product and packaging components and consumables are available to meet production and food safety requirements 1.5 Carry out pre-start checks on process and related equipment to confirm readiness for use according to workplace procedures 1.6 Load or position packaging components and consumables according to workplace procedures and safety requirements 1.7 Set parameters to meet safety and packaging requirements
2. Operate and monitor the case packing process	2.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 2.2 Report any variation in equipment operation according to workplace procedures 2.3 Monitor packaging quality and packaging appearance to confirm that specifications are met 2.4 Identify, rectify and report out-of-specification process outcomes according to workplace requirements 2.5 Follow and apply workplace cleaning and environmental procedures
3. Shut down the case packing process	3.1 Identify the appropriate shutdown procedure and implement safely according to operating procedures 3.2 Identify and report maintenance requirements according to workplace procedures 3.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2018 Operate a case packing process	FDFOP2018A Operate a case packing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2018 Operate a case packing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a case packing process on at least one occasion, including:

- accessing workplace information to identify case packing requirements
- selecting, fitting and using PPE
- confirming supply of necessary packaging components/consumables, including boxes/cartons and related consumables
- inspecting the quality of packaging components/consumables to confirm that standards are met
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters to suit product type
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for packaging requirements
 - loading packaging components/consumables
 - positioning electronic eyes and sensors correctly
 - ensuring all safety guards are in place and operational
 - confirming coders are correctly set for date and product requirements
- starting, operating, monitoring and adjusting pick-and-place equipment to achieve required outcomes, including monitoring control points and conducting inspections, as required, to confirm process remains within specification:
 - box formation
 - alignment, placement and quantity of units packed
 - operation of suction cups
 - operation of related equipment (e.g. box closers and sealers)

- operation of ink jet coders to confirm correct code and clarity/legibility
- following procedures to reference or align equipment against set-up parameters
- monitoring flow of product to the process, and packaged goods from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take case packing process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing equipment for cleaning
- completing workplace records as required
- maintaining work area to meet workplace cleaning standards
- using process control systems according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of secondary packaging, including the requirements of packaging materials used and coding requirements
- basic operating principles of case packing equipment, including main equipment components, status and purpose of guards, purpose and location of electronic eyes and sensors, equipment operating capacities and applications, and services required for operation of case packers used in the workplace
- the flow of product to this stage in the packing process and the effect of outputs on downstream processes
- quality characteristics and requirements of outer packaging materials and of the packaged product, including board quality and finished packaged product specifications
- methods used to monitor the process, including visual inspection of the process and of the quality of the packaged product
- inspection or test points (control points) in the process and the related procedures and recording requirements, and testing gluing or sealing of packages where required
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam-up
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation and corrective action required, including the effect of variation in packaging components/consumables on performance
- contamination/food safety hazards and risks associated with this stage in the packaging process and related control measures
- work health and safety hazards and controls for operating a case packing process

- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the packaging process, including waste collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for operating a case packing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - automated case packers and related equipment and services
 - product to be packaged, and board and related consumables
 - documentation
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems and production/packaging schedules
 - information on equipment capacity and operating parameters
 - specifications, control points and operating parameters
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2019 Fill and close product in cans

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a primary packaging process that fills product into cans and hermetically seals containers using a closer or seamer.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing packing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a filling and closing process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that materials and packaging components and consumables are available to meet operating and food safety requirements 1.5 Identify and confirm workplace cleaning and maintenance requirements
2. Prepare the filling and closing process for operation	2.1 Fit and adjust machine components and related attachments according to work health and safety and operating requirements 2.2 Enter operating parameters to meet safety and production requirements 2.3 Carry out pre-start checks, adjusting equipment performance according to operator instructions
3. Operate and monitor the filling process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 3.2 Monitor the process to confirm that filled and closed containers meet specifications 3.3 Identify, rectify and report out-of-specification equipment, product and process outcomes according to workplace requirements 3.4 Follow and apply workplace cleaning and environmental procedures
4. Monitor closure and seaming stage	4.1 Monitor the closing stage to confirm that closures and seams meet specifications 4.2 Identify and report out-of-specification process outcomes according to workplace procedures
5. Shut down the filling and closing process	5.1 Identify the appropriate shutdown procedure and implement safely according to operating procedures 5.2 Report maintenance requirements according to workplace procedures 5.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2019 Fill and close product in cans	FDFOP2019A Fill and close product in cans	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2019 Fill and close product in cans

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has filled and closed product in cans on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using PPE
- confirming supply of necessary materials and services for filling and closing product in cans
- preparing/conditioning product for filling in cans
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters to suit filling requirements
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for filling and seaming requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been completed
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the filling process and equipment to achieve required outcomes, including monitoring control points, and conducting inspections, as required, to confirm process remains within specification, including:
 - fill temperatures
 - headspace
 - vacuum
 - visual appearance of the product
 - line speed/throughput
- monitoring supply and flow of materials to and from the process

- starting, monitoring and adjusting the closer to confirm alignment and formation of the seam
- monitoring control points and conducting inspections related to the seaming/closing process, and confirming that coding is correct
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- conducting shift handover procedures
- maintaining work area to meet workplace cleaning standards
- using process control systems according to enterprise procedures
- inspecting seams according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of filling and closing, including the properties and requirements of packaging materials used, hermetic sealing and properties of containers used for this purpose, coding requirements and related legal requirements, including product weight
- the flow of this process and the effect of the filling and seaming process on downstream processes
- basic operating principles of equipment, including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- quality characteristics of the filled and closed container, including seam components and integrity requirements within level of responsibility for inspection
- effect of raw material characteristics on filling and seaming
- quality parameters for cans and ends
- methods used to prepare product for filling
- effect of process variables, including headspace, fill temperature and vacuum, on the process
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam-up
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

- techniques used to monitor the production/packing process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety issues associated with filling and seaming, and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for filling and closing product in cans.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - filling and closing and related equipment and services
 - materials to be filled as required
 - packaging components/consumables
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment as required
 - documentation
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - production schedule
 - information on equipment capacity and operating parameters
 - specifications, control points and operating parameters
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2020 Operate a form, fill and seal process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a form, fill and seal process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing packing environment. It typically applies to the worker responsible for applying basic operating principles to the operation and monitoring of a forming, filling and sealing process and associated equipment. This is a primary packaging process to package product into appropriate packaging. It can apply to both aseptic and non-aseptic form and fill processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in	1.1 Read or listen to work instructions from supervisor and clarify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
processing area	where needed 1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that materials and packaging components and consumables are available to meet operating and food safety requirements 1.5 Identify and confirm workplace cleaning and maintenance requirements and status
2. Prepare the forming, filling and sealing equipment and process for operation	2.1 Fit and adjust machine components and related attachments to meet safety and operating requirements 2.2 Enter operating parameters to meet safety and production requirements 2.3 Carry out pre-start checks, adjusting equipment performance according to operating procedures
3. Operate and monitor the forming, filling and sealing process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 3.2 Monitor packaging quality and seal integrity in operating conditions 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace cleaning and environmental procedures
4. Shut down the forming, filling and sealing process	4.1 Identify the appropriate shutdown procedure and implement 4.2 Report routine maintenance requirements according to workplace procedures 4.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2020 Operate a form, fill and seal process	FDFOP2020A Operate a form, fill and seal process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2020 Operate a form, fill and seal process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a form, fill and seal process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using PPE
- confirming supply of necessary packaging components/consumables and product
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for packaging requirements
 - loading packaging components/consumables
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been completed
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the forming, filling and sealing process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - formation of container/packaging
 - flow rates
 - product weights and volumes
 - fill levels
 - temperature, including product and sealing temperatures
 - supply of packaging components/consumables

- packaging quality and seal integrity, including testing packaging integrity
- monitoring supply and flow of materials to and from the form, fill and seal process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take forming, filling and sealing process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing forming, filling and sealing equipment for cleaning
- completing workplace records as required
- maintaining work area to meet workplace cleaning standards
- using process control systems according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of forming, filling and sealing, including:
 - the purpose and characteristics required of packaging materials used
 - the methods used to form packaging, fill and seal product (where methods involve vacuum or map packaging, it includes an understanding of the effect of modified atmosphere on product shelf-life)
- product and packaging coding requirements and related legal requirements, including product weight
- basic operating principles of forming, filling and sealing equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - services required for operation of form, fill and seal equipment used in the workplace
- the flow of processes supplying the forming, filling and sealing process and the effect of process output on downstream processes
- quality characteristics and requirements of forming, filling and sealing, including:
 - quality requirements of product and packaging components/consumables
 - requirements of packaging forming stage, and filling, including fill levels and weights
 - requirements of seal formation and integrity, and integrity testing procedures, where required
- methods used to monitor the process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements

- operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam-up
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation and corrective action required, including the effect of variation in both product characteristics and packaging components/consumables on forming, filling and sealing performance
- food safety hazards and risks associated with forming, filling and sealing, and related control measures
- work health and safety hazards and controls relevant to the form, fill and seal process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the forming, filling and sealing process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- aseptic container preparation/forming, filling and sealing requirements
- cleaning and sanitation procedures for a form, fill and seal process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - forming, filling and sealing process and related equipment and services
 - materials and packaging components/consumables to be formed, filled and sealed
 - product
 - sampling schedules and test procedures and equipment as required
 - documentation
 - cleaning procedures, materials and equipment as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production/packaging schedules
 - information on equipment capacity and operating parameters
 - specifications, control points and operating parameters
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2021 Operate a fill and seal process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a fill and seal process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing packing environment. It typically applies to the worker responsible for applying basic operating principles to the operation and monitoring of a filling and sealing process and associated equipment. This is a primary packaging process to fill product into packaging, including bottles, boxes, drums, bladders and pails. It can apply to both aseptic and non-aseptic filling and sealing processes.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in	1.1 Read or listen to work instructions from supervisor and clarify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
processing area	where needed 1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that materials and packaging components and consumables are available to meet food safety and operating requirements 1.5 Identify and confirm cleaning and maintenance requirements and status
2. Prepare the filling and sealing equipment and process for operation	2.1 Fit machine and adjust machine components and related attachments to meet safety and operating requirements 2.2 Enter operating parameters as required to meet safety and production requirements 2.3 Carry out pre-start checks, adjusting equipment performance according to work health and safety and operating procedures
3. Operate and monitor the filling and sealing process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor packaging quality and seal integrity to meet safety and production requirements 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace cleaning and environmental procedures
4. Shut down the filling and sealing process	4.1 Identify the appropriate shutdown procedure and implement 4.2 Report maintenance requirements according to workplace procedures 4.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2021 Operate a fill and seal process	FDFOP2021A Operate a fill and seal process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2021 Operate a fill and seal process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a fill and seal process on at least one occasion, including:

- accessing workplace information to identify filling and packaging requirements
- selecting, fitting and using PPE
- confirming supply of necessary packaging components/consumables, product and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for packaging requirements
 - loading packaging components/consumables
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been completed
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the filling and sealing process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - flow rates
 - product weights and volumes
 - fill levels
 - times and temperatures, including product and sealing temperatures
 - supply of packaging components/consumables
 - packaging quality and seal integrity, including testing seal integrity
- taking corrective action in response to out-of-specification results

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take filling and sealing process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing filling and sealing equipment for cleaning
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of filling and sealing, including the purpose and characteristics required of packaging materials used and the method used to fill and seal product (where methods involve vacuum or map packaging, it includes an understanding of the effect of modified atmosphere on product shelf-life)
- product and packaging coding requirements and related legal requirements, including product weight
- basic operating principles of filling and sealing equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - services required for operation of filling equipment used in the workplace
- the flow of processes supplying the filling and sealing process and the effect of outputs on downstream processes
- quality characteristics and requirements of filling and sealing, including:
 - quality requirements of product and packaging components/consumables
 - requirements of filling, including fill levels and weights
 - requirements of seal formation and integrity, and integrity testing procedures, where required
- methods used to monitor the process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including procedures to clear a breach and restart following a crash or jam-up, as appropriate

- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation and corrective action required, including the effect of variation in both product and packaging components/consumables on filling and sealing performance, which also includes the effect of temperature variation on the filling process
- food safety hazards and risks associated with filling and sealing, and related control measures
- work health and safety hazards and controls requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the filling and sealing process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- aseptic filling and sealing requirements
- cleaning and sanitation procedures for the filling and sealing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - filling and sealing process and related equipment and services
 - materials and packaging components/consumables to be formed and filled
 - product
 - sampling schedules and test procedures and equipment as required
 - documentation
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems and production/packaging schedules
 - information on equipment capacity and operating parameters
 - specifications, control points and operating parameters
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2022 Operate a high speed wrapping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a primary packaging process using high speed wrapping equipment to enclose product in a sealed, airtight film or cello package.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing packing environment. It typically applies to the worker responsible for applying basic operating principles to the operation and monitoring of a high speed wrapping process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that materials and packaging components and consumables are available to meet food safety and production requirements
2. Prepare the wrapping equipment and process for operation	2.1 Carry out pre-start checks on process and related equipment to confirm readiness for use 2.2 Load and position packaging components and consumables according to operating procedures 2.3 Set parameters to meet safety and packaging requirements
3. Operate and monitor the wrapping process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor packaging quality and seal integrity to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace cleaning and environmental procedures
4. Shut down the wrapping process	4.1 Identify the appropriate shutdown procedure and implement 4.2 Report maintenance requirements according to workplace procedures 4.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret workplace and standard operating procedures relevant to job role

Skill	Description
	Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2022 Operate a high speed wrapping process	FDFOP2022A Operate a high speed wrapping process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2022 Operate a high speed wrapping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a high speed wrapping process on at least one occasion, including:

- accessing workplace information to identify wrapping requirements
- selecting, fitting and using personal protective equipment
- confirming supply of necessary packaging materials/film/cello and product, including inspecting the quality of both product and wrapping material to confirm that standards are met
- conducting pre-start checks, including:
 - inspecting equipment and conveyor belt condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters to suit product type
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for packaging requirements
 - loading/threading packaging components/consumables
 - positioning electronic eyes and sensors correctly
 - ensuring all safety guards are in place and operational
 - confirming coders are correctly set for date and product requirements
- starting, operating, monitoring and adjusting wrapping equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - product alignment
 - product weights
 - packaging quality
 - packaging and product alignment
 - seal integrity, including testing packaging integrity

- codes, correct content and clarity/legibility
- monitoring flow of product to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take high speed wrapping process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing wrapping equipment and conveyors for cleaning
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of wrapping, including the properties and requirements of packaging materials used, coding requirements and related legal requirements (for example, product weight)
- basic operating principles of wrapping equipment, including:
 - main equipment components (for example, conveyors and related guides and alignment adjustments)
 - purpose and location of electronic eyes and sensors
 - status and purpose of guards
 - equipment operating capacities and applications, and services required for operation of wrapping equipment used in the workplace
- the flow of product to the wrapping process and the effect of outputs on downstream processes
- quality characteristics and requirements of product to be wrapped, wrapping materials and the final wrapped product
- methods used to monitor the process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation and corrective action required, including the effect of variation in both product and packaging components/consumables on performance

- contamination/food safety hazards and risks associated with the wrapping process and related control measures
- work health and safety hazards and controls relevant to the high speed wrapping process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the filling and wrapping process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for a high speed wrapping process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - high speed wrapping machine and related equipment and services
 - materials to be wrapped, cello/film and other packaging components/consumables
 - documentation
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems and production/packaging schedules
 - information on equipment capacity and operating parameters
 - specifications, control points and operating parameters
 - recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2023 Operate a packaging process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a packaging process or sub-system.

This unit applies to individuals who operate and monitor a packaging process and associated equipment in a food processing packaging environment. The unit applies in a food processing packaging environment where no other specific packaging unit is available.

A packaging process may relate to primary and secondary packaging activities. It typically requires the operation of a series of related items of equipment to achieve the required outcome.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in	1.1 Read or listen to work instructions from supervisor and clarify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
processing area	where needed 1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment (PPE) and ensure correct fit 1.4 Confirm that packaging components and consumables, materials and items to be packaged are available to meet operating requirements 1.5 Identify and confirm cleaning and maintenance requirements and status according to workplace procedures
2. Prepare the equipment and process for operation	2.1 Fit and adjust machine components and related attachments 2.2 Enter operating parameters to meet safety and production requirements 2.3 Load or position materials, product and packaging components and consumables according to food safety and operating requirements 2.4 Check and adjust equipment performance according to operating and job requirements 2.5 Carry out pre-start checks according to operator instructions
3. Operate and monitor the process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements
4. Shut down the process	4.1 Identify the appropriate shutdown procedure 4.2 Shut the process down safely according to operating procedures 4.3 Report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	Communicate and report operational and safety information to relevant personnel
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2023 Operate a packaging process	FDFOP2023A Operate a packaging process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2023 Operate a packaging process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a packaging process on at least one occasion, including:

- accessing workplace information to identify packaging requirements
- selecting, fitting and using PPE
- confirming supply of necessary packaging components/consumables, materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - setting coders and printers
 - selecting appropriate equipment settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for packaging requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been completed
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting packaging equipment to achieve required outcomes, including:
 - packaging components/consumables and/or product
 - monitoring control points (for example, weights, codes, placement, glue temperatures, alignment and appearance, configuration and seal integrity) as required to confirm process remains within specification
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment

- following isolation and lock-out/tag-out procedures as required to take packaging equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the packaging process, including:
 - the purpose and characteristics required of packaging materials used
 - the principles of the packaging process used (where methods involve vacuum or map packaging, it includes an understanding of the effect of modified atmosphere on product shelf-life)
- product and packaging coding requirements and related legal requirements, including product weight
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of processes supplying the packaging process and the effect of outputs on downstream processes
- quality characteristics required of the packaging process, including seal integrity requirements
- effect of variation in inputs, including packaging components/consumables, materials and/or services, on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters, including restart procedures following a crash or jam-up
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the packaging process, including visual inspecting, and measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks related to stages in the packaging process, and related control measures
- common causes of variation and corrective action required

- work health and safety hazards and controls relevant to the packaging process
- requirements of different shutdowns as appropriate to the packaging process, including;
 - emergency and routine shutdowns and procedures to follow in the event of a power outage
 - conducting basic equipment referencing where required
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for packaging equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - packaging and related equipment and services
 - materials to be packaged and packaging components/consumables
 - sampling schedules, test procedures and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - specifications, control points and operating parameters
 - documentation and recording procedures
 - cleaning procedures, materials and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2024 Operate a cooling, slicing and wrapping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a cooling, slicing and wrapping process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food production environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of machines and equipment used to cool, slice and wrap food product.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm that product and packaging consumables are available to meet operating and food safety requirements 1.5 Identify and confirm cleaning and maintenance requirements and status have been met
2. Prepare the cooling, slicing and wrapping equipment and process for operation	2.1 Fit and adjust machine components and related attachments according to operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check and adjust equipment to ensure optimum performance 2.4 Carry out pre-start checks according to operator instructions
3. Operate and monitor the cooling, slicing and wrapping process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that product is cooled and packaged to meet food safety and production specifications 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace cleaning and environmental procedures
4. Shut down the cooling, slicing and wrapping process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process safely according to operating procedures and clean equipment according to workplace procedures 4.3 Report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2024 Operate a cooling, slicing and wrapping process	FDFOP2024A Operate a cooling, slicing and wrapping process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2024 Operate a cooling, slicing and wrapping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a cooling, slicing and wrapping process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using PPE
- confirming supply of necessary product, packaging consumables and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- confirming settings in the cooler, including:
 - conveyor speed/track position
 - humidity
 - air flow/fan settings
 - product layout/spacing
- confirming settings in the slicing/bagging equipment:
 - knife condition
 - machine speed
 - height/width settings
 - air pressure
 - bag/tag type and coding

- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including:
 - monitoring control points
 - conducting inspections as required to confirm process remains within specification
- monitoring supply and flow of product and packaging consumables to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the cooling, slicing and wrapping process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the cooling, slicing and wrapping process and the effect of outputs on downstream processes and final product
- quality characteristics to be achieved by the process
- quality requirements of packaging materials and effect of variation on process performance and product shelf-life
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the cooling, slicing and bagging process, including inspecting and measuring as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures

- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for the cooling, slicing and wrapping equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - cooling, slicing, bagging and related equipment and services
 - product and packaging consumables
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment as required.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2025 Manufacture extruded and toasted products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an extrusion, toasting and breaking process used in the manufacture of biscuit products.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a biscuit production environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of machines and equipment in the production of biscuits. Biscuits may be for human consumption or animal feed.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in	1.1 Read or listen to work instructions from supervisor and clarify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
processing area	where needed 1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit according to work health and safety requirements 1.4 Confirm materials are available to meet operating requirements 1.5 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety procedures
2. Prepare the extrusion, toasting and breaking process for operation	2.1 Fit and adjust machine components and related attachments 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to operating requirements 2.4 Carry out pre-start checks according to operator instructions
3. Operate and monitor the extrusion, toasting and breaking process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 3.2 Monitor the process to confirm that biscuit product meets specifications 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements
4. Shut down the extrusion, toasting and breaking process	4.1 Identify the appropriate shutdown procedure and implement 4.2 Report maintenance requirements according to workplace procedures 4.3 Maintain workplace records in required format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2025 Manufacture extruded and toasted products	FDFOP2025A Manufacture extruded and toasted products	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2025 Manufacture extruded and toasted products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has manufactured extruded and toasted products on at least one occasion, including:

- accessing workplace information to identify extrusion, toasting and breaking process requirements
- selecting, fitting and using PPE
- confirming supply of necessary materials and services, including ensuring a continuous supply of ingredients to the process
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- confirming extruder settings, including:
 - water pump is operating
 - bin discharge speed
 - temperature and heater
 - motor speed
 - screw feed
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm the process remains within specification, including:

- temperatures
- biscuit size (width, length and thickness)
- biscuit texture, colour and weight
- biscuit moisture level
- clean, even break/cut
- monitoring supply and flow of materials to and from the extrusion, toasting and breaking process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- shutting down equipment in response to an emergency situation
- following isolation and lock-out/tag-out procedures as required to take extrusion, toasting and breaking process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to enterprise procedures
- cleaning and sanitising equipment according to enterprise procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each stage of the biscuit manufacturing process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the process and the effect of outputs on downstream processes
- changes that occur in the product during processing
- quality characteristics to be achieved by the process
- quality requirements of materials and the effect of variation on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing as required by the process

- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to manufacturing extruded and toasted products
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for manufacturing extruded and toasted products.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - extrusion, toasting and breaking process and related equipment and services
 - ingredients to be processed
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule and recipe/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2026 Operate a forming or shaping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a biscuit forming or shaping process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a biscuit production environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of machines and equipment to form and shape biscuit dough. Biscuits may be for human consumption or animal feed.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit according to work health and safety requirements 1.4 Confirm materials and ingredients are available to meet operating and food safety requirements 1.5 Identify and confirm cleaning and maintenance requirements and status
2. Prepare the biscuit forming process for operation	2.1 Fit and adjust machine components and related attachments according to operating requirements 2.2 Enter processing or operating parameters to meet safety and production requirements 2.3 Check and adjust equipment performance according to operating requirements 2.4 Carry out pre-start checks according to operator instructions
3. Operate and monitor the biscuit forming process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating requirements 3.2 Monitor the process to confirm that formed product is produced to specification 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements
4. Shut down the biscuit forming process	4.1 Identify the appropriate shutdown procedure and implement safely 4.2 Report maintenance requirements according to workplace procedures 4.3 Maintain workplace records in required format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2026 Operate a forming or shaping process	FDFOP2026A Operate a forming or shaping process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2026 Operate a forming or shaping process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a forming or shaping process on at least one occasion, including:

- accessing workplace information to identify biscuit forming process requirements
- selecting, fitting and using PPE
- confirming supply and condition of necessary materials and services, including transferring and loading dough into hoppers
- confirming condition of dough, including:
 - dough type matches product specification
 - dough temperature, consistency/texture, moisture level, weight and colour
 - dough standing time
 - dough supply/quantities
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- confirming setting selection, including:
 - setting parameters for process type
 - setting equipment speeds
 - adjusting roller and web settings (as required)
 - adjusting depositing/extrusion settings (as required)

- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including control points and conducting inspections as required to confirm process remains within specification, including:
 - biscuit size, shape and thickness
 - biscuit weight
 - dough temperature
- forming product to specification, including conducting a trial run in preparation for production run
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- conducting product/batch changeovers
- locating emergency stop functions on equipment
- shutting down equipment in response to an emergency situation
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of biscuit forming
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the biscuit forming process and the effect of outputs on downstream processes
- effect of dough quality on process outcomes
- quality characteristics to be achieved by the process
- quality requirements of materials and effect of variation on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including procedures for incorporating reworked dough and procedures for mending webs as required
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems

- methods used to monitor the production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to operating a forming or shaping process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for biscuit forming and shaping equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - forming process and related equipment and services
 - biscuit dough to be formed
 - sampling and testing schedules and procedures and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule and recipe/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording procedures
 - cleaning procedures, materials and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2027 Dispense non-bulk ingredients

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to weigh, measure and label non-bulk ingredients to meet production requirements.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a production environment within the food processing industry. It typically applies to the production worker responsible for the dispensing of ingredients in order to support production operations. Ingredients may be highly concentrated materials, including colours, flavours, buffered acids and preservatives.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and tell supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit according to work health and safety requirements 1.4 Inspect materials to confirm type, quality clearance, and quantities, and identify any obvious contamination or non-compliance
2. Prepare to dispense ingredients	2.1 Select measuring and weighing equipment appropriate to dispensing requirements and confirm readiness for use 2.2 Confirm that containers, bags and labels are available according to job specifications 2.3 Carry out pre-start checks according to operator instructions
3. Measure and/or weigh ingredients	3.1 Weigh or measure non-bulk ingredients and additives according to food safety and job specifications 3.2 Label dispensed ingredients according to workplace procedures 3.3 Monitor the accuracy of measuring and dispensing equipment to identify variation in operating conditions 3.4 Report variations in equipment operation 3.5 Follow and apply workplace cleaning and environmental procedures
4. Complete the dispensing process	4.1 Clean dispensing equipment according to workplace procedures 4.2 Identify and report unacceptable equipment and utensil condition 4.3 Identify and report maintenance requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements

Skill	Description
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2027 Dispense non-bulk ingredients	FDFOP2027A Dispense non-bulk ingredients	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2027 Dispense non-bulk ingredients

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has dispensed non-bulk ingredients on at least one occasion, including:

- accessing workplace information to identify dispensing requirements
- selecting, fitting and using personal protective equipment, including use of breathing apparatus and fume cabinets
- confirming supply of necessary raw materials, including checking ingredient type, grade, quantity, use-by codes and quality clearance
- carrying out visual inspections and tests to confirm that raw materials are appropriate for use
- conducting pre-start checks on equipment, including:
 - inspecting the condition and cleanliness of equipment and utensils
 - taring scales and carrying out any related procedures to confirm that equipment is accurately calibrated and fit for use
 - confirming that any scheduled maintenance has been carried out
- identifying out-of-specification or unacceptable ingredient condition, and taking appropriate corrective action
- measuring materials and additives within specified accuracy range
- taking corrective action in response to out-of-specification results
- pacing dispensing to meet production requirements
- packing and labelling dispensed materials as required
- following labelling procedures, including identifying batch numbers, dates of preparation, contents and use-by information
- reconciling and recording materials dispensed against materials released, and returning unused materials to storage as required
- cleaning dispensing equipment and utensils according to workplace procedures
- responding to and/or reporting equipment failure within level of responsibility

- completing dispensing records by workplace recording system
- maintaining work area to meet housekeeping standards
- using basic equipment to support the dispensing process according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- quality characteristics and related handling requirements of raw materials/ingredients and additives used, including best-by/use-by codes, ingredient compatibility and common allergens used
- storage requirements and shelf-life of ingredients and additives, including ingredients with special storage and handling requirements and including hygroscopic ingredients
- relevant legislative responsibilities and workplace systems for recording and tracing the use of ingredients and additives and related workplace labelling requirements and purpose
- the relationship between the dispensing process and related operations, including accuracy and tolerance and consequence of error
- purpose, measuring and accuracy capacity of instrumentation and related equipment calibration responsibilities and procedures
- control points in the dispensing process
- contamination and food safety issues associated with dispensing and related control measures
- procedures for requisitioning, receiving and returning ingredients from stores
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- cleaning, care and storage of equipment and instrumentation used for dispensing non-bulk ingredients
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the dispensing process, including waste collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - dispensing instrumentation and equipment

- containers, bags, labelling and storage facilities
- raw materials, ingredients and additives to be dispensed
- sampling schedules and test procedures and equipment as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, batch and recipe instructions
 - information on equipment and instrumentation capacity and operating parameters
 - dispensing schedule or batch instructions
 - documentation and recording requirements and procedures
 - cleaning and sanitation procedures, materials and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2028 Operate a mixing or blending process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to combine ingredients and additives in the correct quantities and sequence, and to operate and shut down mixing and blending equipment to achieve the required mix characteristics.

This unit applies to individuals who work under general supervision and exercise limited autonomy in the food processing industry. Mixes may include concentrated pre-mixes or bulk blends. The output of this process may be a product requiring further processing or for external use.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet production requirements 1.2 Wear appropriate personal protective clothing and ensure correct

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	fit according to work health and safety requirements 1.3 Prepare pre-mixes according to food safety and job requirements 1.4 Identify and confirm cleaning and maintenance requirements and status
2. Prepare the mixing or blending equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing or operating parameters to meet production requirements 2.3 Check equipment performance and adjust according to operating requirements 2.4 Perform pre-start checks according to operator instructions
3. Operate and monitor the mixing or blending process	3.1 Deliver ingredients and additives to the mixer in the required quantities and sequence to meet recipe specifications 3.2 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 3.3 Monitor the mixing process to confirm that specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Transfer mix to required production or storage location according to food safety and workplace procedures 3.6 Follow and apply workplace cleaning and environmental procedures
4. Shut down the mixing or blending process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process safely according to operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records in required format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2028 Operate a mixing or blending process	FDFOP2028A Operate a mixing or blending process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2028 Operate a mixing or blending process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a mixing or blending process on at least one occasion, including:

- accessing workplace information to identify mixing/blending requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- adding/loading materials in correct quantities and sequence, including monitoring automatic ingredient addition and/or manual addition
- starting, monitoring and adjusting mixing or blending process equipment to achieve required outcomes, including monitoring flow rates/quantity, time or temperature and mix/blending settings
- monitoring control points and conducting inspections to confirm process remains within specification
- monitoring supply and flow of ingredients and additives to and from the mixing or blending process
- pacing mixing/blending to meet production requirements
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out or tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- labelling and storing pre-mixes and/or mixes according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of preparing mixes and blends, including the characteristics and basic function of ingredients and additives used, method and sequence of ingredient addition required to achieve required blend characteristics and, where relevant, the purpose of conditioning, maturation or holding stages required prior to further processing of the mix
- specific gravity and bulk density as appropriate for ingredients used
- basic operating principles of mixing/blending equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - awareness of calibration schedules for scales and related weighing/measuring equipment
- services required and action to take if services are not available
- the flow of the mixing process and the effect of mix preparation on downstream processes
- procedures for requisitioning, receiving and returning ingredients from stores
- ingredient-handling requirements and shelf-life or coding
- quality characteristics required of ingredients and additives and their effect on mixing process performance, including methods used to condition or prepare ingredients prior to addition
- methods used to monitor the blending or mixing process, including inspecting, measuring and testing, by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements, including:
 - flow rates
 - ingredient/additive addition sequence
 - times/temperatures and agitator speeds
 - required characteristics of blend, including viscosity, appearance and temperature

- required attributes of the mixed or blended output, including chemical, texture and flavour profiles as required
- the effect of the mixing or blending parameters, including temperature and length of mix time on mixing outcome
- contamination and food safety risks associated with the process and related control measures, including product compatibility and cross-contamination risks and associated cleaning requirements, as well as common allergens used in mixes prepared
- operating requirements and parameters, and corrective action required when operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the mixing and blending process
- requirements of different shutdowns as appropriate to the blending or mixing process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities relevant to the mixing and blending process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the mixing or blending process, including waste or rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- characteristics of solutions, suspensions and emulsions for the mixing and blending process
- product labelling and storage requirements for the mixing and blending process
- cleaning and sanitation procedures for mixing or blending equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - mixing/blending process equipment, services and related storage facilities as required
 - ingredients and additives required for the mixing/blending process
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, batch/recipe instructions

- information on equipment capacity and operating parameters
- production schedule/batch/recipe instructions
- specifications, control points and processing parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2029 Operate a baking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down processes used to bake and depan baked products.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing production workplace. It typically applies to the production worker responsible for producing baked products that may include pastry, biscuits, cake and other dough-based products that may be fresh or frozen.

This unit does not apply to production of bread. For bread baking, refer to the relevant plant baking and/or retail baking units of competency.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the baking equipment and process for operation	1.1 Confirm materials are available to meet operating requirements 1.2 Wear appropriate personal protective clothing and ensure correct fit according to work health and safety requirements 1.3 Prepare materials to meet production requirements 1.4 Confirm services are available and ready for operation 1.5 Check equipment performance and pans, and adjust according to operating requirements 1.6 Set the process to meet safety and production requirements 1.7 Conduct pre-start checks according to operator instructions
2. Operate and monitor the baking process	2.1 Start, operate and monitor the baking process for variation in operating conditions according work health and safety and operating procedures 2.2 Load product and bake product to specification according to food safety and operating requirements 2.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 2.4 Follow and apply workplace cleaning and environmental procedures
3. Shut down the baking process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements 3.4 Maintain workplace records in appropriate format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements

Skill	Description
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2029 Operate a baking process	FDFOP2029A Operate a baking process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2029 Operate a baking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a baking process on at least one occasion, including:

- accessing workplace information to identify baking process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- confirming condition and quality of ingredients
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational, and rework bins are positioned
- confirming settings and parameters, including:
 - correct oven settings for baking time
 - oven zone temperatures
 - conveyor speed, loaders and dischargers
 - circulation and exhaust fans
 - water seals
 - burner controls and steam
 - heights, guides and air blowers
 - pre-blast conveyor

- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - baking output, including quantities and product appearance (colour and sheen, uniformity of shape, weight and size, and moisture)
- confirming product is cleanly removed from the pan (depanning stage) and/or belt/band
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on baking equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- sorting, collecting, treating, recycling or disposing of waste, including clearing dust extractors
- completing workplace records
- maintaining work area to meet housekeeping standards
- setting up, starting up and monitoring the proofer, including time and temperature, humidity and position of the loading arm
- monitoring the proving process according to workplace procedures, including dough condition/surface and dough size and height
- setting up and operating finishing equipment according to workplace procedures, including setting topping application equipment, water sprays and splitters (monitoring typically involves checking appearance to confirm even coverage and/or finish to product specification)
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each stage of the baking process, including the stages of the baking process and changes that occur in the product, including starch gelatinisation, the effect of variables (e.g. time, temperature and humidity), and oven zones as appropriate to oven type
- basic operating principles of equipment, including:
 - the difference between convection and impingement ovens
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the baking process and the effect of outputs on customer satisfaction and downstream processes, including packaging

- quality requirements of materials and the effect of variation on baking process performance
- quality characteristics to be achieved by the baked product
- process specifications, procedures and operating parameters for different baked pastry products
- operating requirements, parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the baking process, including inspecting, measuring and testing, by the process
- inspection or test points (control points) in the baking process and the related procedures and recording requirements, including the ability to conduct dew point and/or wet bulb tests
- contamination/food safety risks associated with the baking process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls, including risks of spontaneous combustion and limitations of protective clothing and equipment used
- requirements of different shutdowns as appropriate to the baking process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities relevant to operating a baking process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the baking process, including waste/rework collection and handling procedures related to the process
- purpose and operating procedures for related processes, including in-line proving and finishing equipment where relevant
- basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance procedures for baking equipment
- cleaning and sanitation procedures for baking equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - baking and depanning equipment and services, and related equipment
 - product to be baked
 - sampling schedules and test procedures and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - specifications, control points and processing parameters
 - production schedule and recipe/batch instructions
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2030 Operate a brewery fermentation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a brewery fermentation process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a brewery fermentation process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPOPR2011 Identify key stages and beer production equipment in a brewery

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the fermentation process for operation	1.1 Check production requirements according to job specifications 1.2 Confirm availability of required materials according to operating

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Confirm availability of services according to workplace procedures 1.4 Wear appropriate personal protective clothing and ensure correct fit according to work health and safety requirements 1.5 Conduct pre-start checks according to operator instructions, including checking that hygiene and sanitation standards are met and all safety guards are in place 1.6 Set the fermentation process to meet production requirements
2. Operate and monitor the system	2.1 Start up, operate and monitor the system for variation in operating conditions according to work health and safety and operating procedures 2.2 Confirm system and sub-system outputs meet specifications 2.3 Monitor equipment to confirm operating condition 2.4 Monitor and control temperature to confirm operating condition 2.5 Monitor and control pressure to ensure operating condition 2.6 Undertake analysis to ensure yeast effectiveness and freedom from bacterial contamination according to food safety and workplace procedures
3. Recover beer if required	3.1 Put yeast slurry through a beer recovery process in order to minimise beer wastage 3.2 Transfer recovered beer to appropriate tank or vessel according to food safety and workplace procedures
4. Shut down the system	4.1 Shut down the system safely according to operating procedures 4.2 Clean and maintain equipment to meet the cleaning schedule and procedural requirements 4.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures 4.4 Record workplace information in the appropriate format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2030 Operate a brewery fermentation process	FDFOP2067A Operate a brewery fermentation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2030 Operate a brewery fermentation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a brewery fermentation process on at least one occasion, including:

- accessing workplace information to identify process requirements
- confirming availability of materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- operating vessel transfer equipment
- handling dangerous goods according to procedures
- monitoring control points within the fermentation process
- undertaking corrective action required in the event of variation to specifications and operating parameters
- sampling to ensure yeast effectiveness and freedom from bacterial contamination
- identifying work health and safety hazards and implementing appropriate action
- shutting down the process and equipment, and implementing cleaning requirements associated with changeovers
- handling waste according to requirements and procedures
- cleaning and sanitising equipment according to workplace procedures
- selecting, fitting and using personal protective clothing and equipment
- maintaining work area to meet housekeeping standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose, principles and requirements of the fermentation process
- relationship between the fermentation process, the wort production process and the maturation process
- stages and changes that occur during fermentation
- fermentation process specifications, procedures and operating parameters
- significance of control points within the fermentation process
- fermentation equipment and instrumentation components, purpose and operation
- vessel-cooling systems for the brewery fermentation process
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- procedures and responsibilities for reporting problems during the fermentation process
- environmental issues and controls, including waste handling requirements and procedures for the fermentation process
- shutdown and cleaning requirements associated with changeovers, and types of shutdowns
- recording requirements and procedures for a brewery fermentation process
- cleaning and sanitation procedures for brewery fermentation equipment
- sampling and testing procedures for fermentation.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - relevant hazard control equipment
 - manual handling equipment
 - fermentation process equipment
 - fermentation raw material and other ingredients
- specifications:
 - standard operating procedures and related advice on specific safe work practices, company policies, and codes of practice relating to work health and safety
 - advice on relevant legislation and codes of practice relating to work health and safety
 - information systems and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2031 Operate a coating application process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down processes to dust and apply coatings to product.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing production workplace. This unit typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a coating process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Wear appropriate personal protective clothing and ensure correct

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	fit according to work health and safety requirements 1.3 Identify and confirm workplace cleaning and maintenance requirements and status
2. Prepare the coating process for operation	2.1 Enter processing and operating parameters to meet safety and production requirements 2.2 Check equipment performance and adjust according to operating requirements 2.3 Carry out pre-start checks according to operator instructions
3. Operate and monitor the coating process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating procedures 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace cleaning and environmental procedures
4. Shut down the coating process	4.1 Identify the appropriate shutdown procedure 4.2 Shut the process down safely according to operating procedures 4.3 Identify and report maintenance requirements 4.4 Maintain workplace records in appropriate format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media

Skill	Description
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2031 Operate a coating application process	FDFOP2031A Operate a coating application process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2031 Operate a coating application process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a coating application process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- preparing coating materials as required
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting coating equipment to achieve required outcomes (this will depend on the nature of coating materials), including:
 - condition of coating materials, including checking grist/particle shape and size, and checking for dough balls or lumps in flour-based breadingers
 - viscosity and temperature of batter-type breadingers and glazes
 - condition of product to be coated
 - product orientation/indexing
 - conveyor positions and speeds
 - drum speed
 - compression roller settings (drum applicator)

- dip pond levels
- air blow off settings
- spread/evenness of coating
- monitoring supply and flow of materials to and from the coating process
- taking corrective action in response to out-of-specification results
- conducting product/batch changeovers
- reporting and/or recording corrective action as required
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing equipment for cleaning
- responding to and/or reporting equipment failure within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- preparing breaders and glazes according to workplace procedures
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of coating, including coating process, process design and operation to achieve the coating requirements, related requirements of product and coating condition and equipment settings
- basic operating principles of coating application equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- quality characteristics to be achieved by the coating process
- the flow of the coating process and the effect of product output on downstream processes
- quality requirements of coating materials and product to be coated, and effect of variation on process performance
- operating requirements and parameters of coating application equipment and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor the coating process, including inspecting, measuring and testing as required by the process

- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures relevant to the coating application process
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the coating application process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the coating process, including waste collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for coating application equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - coating process and related equipment and services
 - coating materials and product
 - sampling schedules and test procedures and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule, batch/recipe instructions
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2032 Apply work procedures to maintain integrity of product

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to identify and handle materials to maintain integrity of products.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify materials and specifications for work	1.1 Identify materials required for work processes 1.2 Identify specifications and tests required to determine suitability of

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
process	materials for work processes 1.3 Inspect or test materials according to operating procedures 1.4 Conduct work in accordance with workplace environmental guidelines 1.5 Reject and report out-of-specification materials according to operating procedures
2. Handle materials and products safely	2.1 Identify handling requirements for input materials and products of workstation or process according to work health and safety and food safety requirements 2.2 Handle materials and product according to work health and safety requirements 2.3 Maintain workplace in a clean and tidy order to meet workplace standards and avoid contamination
3. Maintain integrity of product during processing	3.1 Protect materials and products from contamination and exposure to pests 3.2 Follow product changeover procedures to avoid cross-contamination of products 3.3 Identify processes and conditions that are inconsistent with specifications and safety procedures, and take corrective action within level of responsibility 3.4 Restrict and monitor access to work area during processing according to workplace procedures
4. Maintain integrity of product post-processing	4.1 Conduct visual, metal scanning, and other contamination checks prior to packing and despatch 4.2 Check packing materials for cleanliness and integrity before use 4.3 Seal, pack or despatch product from work area according to product and process requirements
5. Comply with personal hygiene standards	5.1 Follow personal hygiene requirements appropriate to the process, product and workplace 5.2 Use clothing and personal protective equipment appropriate to the process, product and workplace

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret basic work instructions and procedures
Writing	Record testing, non-compliance and task-related information on paper-based and electronic media
Numeracy	Perform basic numerical calculations and estimations for checking and testing
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Understand tasks and responsibilities required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Confirm work requirements and priority areas - Communicate and report workplace activity and safety information to relevant personnel
Get the work done	- Maintain a clean and hazard-free work area - Maintain hygiene standards and wear required personal protective equipment - Maintain quality requirements for the sanitisation and use of equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2032 Apply work procedures to maintain integrity of product	FDFOP2062A Apply work procedures to maintain integrity of product	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2032 Apply work procedures to maintain integrity of product

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has applied work procedures to maintain integrity of product on at least one occasion, including:

- accessing and interpreting workplace information on materials and equipment used in production process
- examining production specifications
- identifying and inspecting materials and equipment
- handling, cleaning and storing equipment, containers, packaging materials and similar items according to the requirements of the work role
- wearing and maintaining appropriate clothing/footwear as required by work tasks and consistent with production, safety and product integrity requirements
- maintaining the work area in a clean and tidy state
- identifying and reporting signs of pest infestation
- conducting work in accordance with workplace environmental guidelines and work health and safety procedures
- following product changeover procedures to avoid cross-contamination of products.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- requirements to maintain integrity of materials and finished products, including weight, consistency, sterility where applicable, and conformance to specifications
- potential sources of bacterial, chemical and physical contamination in own workplace
- sources of further advice and assistance in the workplace
- actions required in the event of events that actually or potentially compromise the integrity of products or materials

- storage and handling requirements for ingredients, materials and product used related to work role
- housekeeping requirements and responsibilities relating to own work, including use and storage of housekeeping/cleaning equipment
- procedures to follow in the event of pest sighting or discovery of infestation
- work health and safety hazards and controls relevant to handling materials to maintain integrity of products, including limitations of personal protective equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - materials required for production
 - process and related equipment and services
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2033 Operate a depositing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a depositing process to deposit into tins, onto belts or directly onto product, where a further processing outcome is required.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing production environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a depositing process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in depositing processing	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
area	1.2 Confirm materials are available to meet operating requirements 1.3 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the depositing equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures 2.5 Transfer materials to depositing equipment according to workplace procedures
3. Operate and monitor the depositing process	3.1 Start, operate and monitor the depositing process for variation in operating conditions 3.2 Monitor the depositing process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental working procedures
4. Shut down the depositing process	4.1 Identify the appropriate shutdown procedure 4.2 Shut the process down according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2033 Operate a depositing process	FDFOP2033A Operate a depositing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2033 Operate a depositing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a depositing process on at least one occasion, including:

- accessing workplace information to identify depositing processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services for production, including confirming condition of materials, including temperature, texture, appearance and holding times, prior to use
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - setting up depositor manifold and controls to meet production requirements and cancelling isolation or lock-outs
 - confirming that related equipment is clean and correctly configured for processing requirements
 - sensors and controls are correctly positioned
 - any scheduled maintenance has been carried out
 - all safety guards are in place and operational
- starting, operating, monitoring and adjusting depositing process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm the process remains within specification, including:
 - maintaining supply of materials to hopper
 - controlling weights
 - checking dimensions and positioning of deposited material
 - visual inspections to identify faults, including unacceptable placement
 - checking pump stroke settings
 - checking line speed

- monitoring supply and flow of materials to and from the depositing process to confirm process remains within specification
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take depositing process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the depositing process, including product preparation and conditioning requirements and product depositing
- basic operating principles of equipment used in the depositing process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - services required and action to take if services are not available
- the flow of the depositing process and the effect of outputs on downstream processes
- quality requirements of materials for depositing and the effect of variation on depositing process performance and outputs
- quality characteristics required of outputs from the depositing process
- operating requirements and parameters of the depositing process, and corrective action required where operation is outside specified operating parameters
- scope to adjust for weight variation within workplace quality parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the depositing process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the depositing process and related control measures
- common causes of variation in the operation of the depositing process and corrective action required

- work health and safety hazards and controls relevant to the operation of the depositing process
- requirements of different shutdowns as appropriate to the depositing process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the depositing process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the depositing process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitising procedures required for the depositing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - depositing and related equipment
 - ingredients/mix to be deposited
 - recipe/batch instructions
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment
 - documentation and recording requirements and procedures
 - cleaning procedures, materials and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2034 Operate an evaporation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an evaporation process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of an evaporation process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed 1.2 Confirm materials are available to meet operating and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Identify and confirm cleaning and maintenance requirements and status 1.4 Wear appropriate personal protective clothing and ensure correct fit according to work health and safety requirements
2. Prepare the evaporation process for operation	2.1 Enter processing and operating parameters as required to meet safety and production requirements 2.2 Check equipment performance and adjust according to operating requirements 2.3 Carry out pre-start checks according to operator instructions
3. Operate and monitor the evaporation process	3.1 Start, operate and monitor the process for variation in operating conditions according to work health and safety and operating requirements 3.2 Identify variation in equipment operation and report maintenance requirements 3.3 Monitor the process to confirm that specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Follow and apply workplace cleaning and environmental procedures
4. Shut down the evaporation process	4.1 Identify the appropriate shutdown procedure 4.2 Shut the process down safely according to operating procedures 4.3 Identify and report maintenance requirements 4.4 Maintain workplace records in appropriate format

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2034 Operate an evaporation process	FDFOP2034A Operate an evaporation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2034 Operate an evaporation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated an evaporation process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- preparing materials for an evaporation process
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting evaporation equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - temperatures
 - vacuum
 - motor amperage
 - condensate flow
 - steam flow and pressure
 - throughput
 - time/speed

- evaporated product characteristics
- monitoring supply and flow of materials to and from the evaporation process
- taking corrective action in response to out-of-specification results
- reporting and/or recording corrective action as required
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing equipment for cleaning
- responding to and/or reporting equipment failure within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of evaporation, including:
 - an understanding of the principles of steam
 - the relationship between boiling point and pressure as applied to evaporation
 - the changes that occur to product as it moves through the evaporation process
- basic operating principles of evaporation equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- quality characteristics to be achieved by the evaporation process
- the flow of the evaporation process and the effect of product output on downstream processes
- quality requirements of materials and the effect of variation on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor the evaporation process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures relevant to the evaporation process

- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the evaporation process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the evaporation process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for evaporation equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - evaporation process and related equipment and services
 - materials to be evaporated
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule, batch/recipe instructions
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2035 Operate an enrobing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an enrobing process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of an enrobing process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm tempered chocolate is available for enrobing, and condition centres/bars as required to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the enrobing equipment and process for operation	2.1 Fit and adjust machine components and related attachments to meet operating requirements 2.2 Enter processing/operating parameters as required to meet safety and production requirements 2.3 Check and adjust equipment performance according to operating requirements 2.4 Carry out pre-start checks according to work health and safety and operating requirements
3. Operate and monitor the enrobing process	3.1 Start, operate and monitor the enrobing process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product and process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the enrobing process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating requirements 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2035 Operate an enrobing process	FDFOP2035A Operate an enrobing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2035 Operate an enrobing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated an enrobing process on at least one occasion, including:

- accessing workplace information to identify enrobing process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of tempered chocolate and the relevant centres/biscuits are available at the correct temperature
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting enrobing process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - supply of chocolate to the enrobing reservoir
 - temperatures of chocolate and pipelines
 - chocolate temper
 - chocolate supply pump speed
 - curtain flow
 - blower and vibrator settings
 - temperature profile of cooling tunnel

- chocolate coverage
- backing off and tailing
- product weight
- appearance
- cooling temperatures
- monitoring supply and flow of materials to and from the enrobing process and equipment operation to confirm process remains within specification
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take enrobing process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the enrobing process, including the effect of chocolate viscosity on enrobing, and types of chocolate suitable/used for coverage and backing off
- basic operating principles of equipment used for the enrobing process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for the enrobing process and action to take if services are not available
- the flow of the enrobing process and the effect of outputs on downstream processes
- conditioning requirements for centres/bars/biscuits and chocolate, including understanding of temper test procedures
- quality characteristics of centres/bars/biscuits and chocolate for use in the enrobing process and the effect of variation on process performance and outputs
- quality characteristics to be achieved by the enrobing process
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the enrobing process, including inspecting, measuring and testing as required by the process

- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the enrobing process and related control measures
- common causes of variation for the operation of the enrobing process and corrective action required
- work health and safety hazards and controls relevant to the operation of the enrobing process
- requirements of different shutdowns as appropriate to the enrobing process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the enrobing process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the enrobing process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitising procedures required for the enrobing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services, including enrober and cooling equipment
 - materials to be processed, including tempered chocolate and conditioned centres to be enrobed
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, control points and processing parameters
 - sampling schedules and test procedures and equipment.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2036 Operate an extrusion process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an extrusion process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of an extrusion process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in extrusion processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the extrusion equipment and process for operation	2.1 Enter processing and operating parameters as required to meet safety and production requirements 2.2 Check equipment performance and adjust according to production requirements 2.3 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the extrusion process	3.1 Deliver ingredients and additives to the extrusion process in the required quantities and sequence 3.2 Monitor preparation of the mass to confirm that specifications are met and mass is suitable for extrusion 3.3 Start, operate and monitor the extrusion process for variation in operating conditions according to workplace procedures 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the extrusion process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2036 Operate an extrusion process	FDFOP2036A Operate an extrusion process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2036 Operate an extrusion process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated an extrusion process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials/ingredients and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting and fitting appropriate attachments where required
 - setting processing parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required at each stage of the extrusion process to confirm process remains within specification, including:
 - parameters, including throughput
 - load/work input as measured by rpm (revolutions per minute)
 - kilowatts
 - amps and/or Hz (hertz) at each stage of the process
- monitoring supply of materials to and from the extrusion process
- taking corrective action in response to out-of-specification results

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each part of the process, including the purpose and methods used to achieve each stage of the extrusion process
- basic operating principles of equipment used for the extrusion process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required for the extrusion process and action to take if services are not available
- the flow of the extrusion process and the effect of outputs on downstream processes
- quality characteristics of extruded output, including required characteristics of mass or blend to be extruded, including:
 - gelatinisation and viscosity
 - dimensions, texture and hardness of extruded product
 - moisture content
- effect of variation in inputs and/or services on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including the effect of variation in key variables, including:
 - throughput and work input at each stage of the process
 - effect of time and temperature
 - barrel pressures and temperatures at each zone
- typical equipment faults for the extrusion process and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems, including:
 - screw and barrel assembly wear
 - die plate wear
 - wear of conditioner paddles
 - extruder knife condition

- methods used to monitor the extrusion process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- common causes of variation in the operation of the extrusion process and corrective action required
- contamination risks related to the extrusion process and related control measures
- work health and safety hazards and controls relevant to the operation of the extrusion process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the extrusion process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the extrusion process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the extrusion process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - extrusion and related equipment and services
 - ingredients/blend/mass to be extruded
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2037 Operate a filtration process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a filtration process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a filtration process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in filtration processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the filtration equipment and process for operation	2.1 Fit and adjust machine components and related attachments to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the filtration process	3.1 Start, operate and monitor the filtration process for variation in operating conditions 3.2 Confirm separation of solids from solution meets specifications 3.3 Monitor the process to confirm that specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the filtration process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2037 Operate a filtration process	FDFOP2037A Operate a filtration process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2037 Operate a filtration process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a filtration process on at least one occasion, including:

- accessing workplace information to identify filtration processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting and fitting appropriate screens and equipment components
 - selecting settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting filtration process and equipment to achieve required outcomes, including:
 - flow rates
 - residence time
 - solids for in-feeds and out-feeds (this is typically done by conducting a spin test)
- monitoring supply and flow of materials to and from the filtration process
- taking corrective action in response to out-of-specification results, including identifying and responding to sieve or screen blockages or tears
- identifying and/or reporting equipment faults, including confirming condition screens and sieves and replacing damaged components within level of responsibility
- locating emergency stop functions on equipment

- follow isolation and lock-out/tag-out procedures to take filtration and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- cleaning and sanitising filtration equipment
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of filtration, including stages and changes that occur during filtration
- basic operating principles of filtration equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications, including relevant screens and sieves by filtration equipment
 - the purpose and location of sensors and related feedback instrumentation
- services required for operation of filtration equipment used in the workplace
- the flow of the filtration process and the effect of product output on downstream processes
- effect of raw material characteristics on filtration performance
- quality characteristics required of filtration process output
- test methods used to monitor solids in in-feed and out-feed streams
- operating requirements and parameters for the filtration process and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems, including screen or sieve damage
- common causes of variation in the operation of the filtration process and corrective action required
- spoilage and other food safety risks associated with filtration
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the filtration process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- cleaning procedures appropriate for the range of filtration components used
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the filtration process
- cleaning and sanitising methods and procedures required for the filtration process
- procedures and responsibility for reporting production and performance information

- environmental issues and controls relevant to filtration, including handling of effluent
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - filtration and related equipment and services
 - materials required for filtration
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, and batch/recipe instructions
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2038 Operate a grinding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a grinding process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a grinding process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in grinding processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Confirm materials are available to meet operating requirements 1.3 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the grinding equipment and process for operation	2.1 Fit and adjust machine components and related attachments to meet operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the grinding process	3.1 Start, operate and monitor the grinding process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the grinding process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2038 Operate a grinding process	FDFOP2038A Operate a grinding process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2038 Operate a grinding process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a grinding process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services to the grinding process
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- operating stockfeed control panel to transfer and grind product
- monitoring and adjusting the grinding process and equipment operation to achieve required outcomes, including:
 - monitoring control points and conducting inspections as required to confirm process remains within specification
 - running adjustments to hammer mills and roller mills
- monitoring supply and flow of materials to and from the grinding process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment

- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- sorting, collecting, treating, recycling or disposing of waste
- maintaining work area to meet housekeeping standards
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the grinding process, including the characteristics of materials, which can be reduced to a suitable form for product, including stockfeed
- basic operating principles of equipment used to operate the grinding process, including:
 - main equipment components
 - bulk materials transfer systems and equipment
 - dust collection equipment
 - grinding equipment operating capacities and applications
 - the purpose and location of magnets, sensors and related feedback instrumentation
- services required for the grinding process and action to take if services are not available
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- the flow of the grinding process and the effect of product output on downstream processes
- quality characteristics and uses of grinding process outputs
- effect of the grinding process on the end product
- effect of raw material characteristics on grinding process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults related to the grinding process and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor the production process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the grinding process and related control measures
- common causes of variation for the grinding process and corrective action required
- work health and safety hazards and controls related to the grinding process, including:
 - the risk of dust explosion
 - an understanding of the limitations of protective clothing and equipment relevant to the work process

- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the grinding process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- cleaning and sanitation procedures required for the operation of the grinding process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - grinding and related equipment and services
 - stock required for the grinding process
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, batch/recipe instructions
 - specifications, control points and processing parameters
 - production schedule/batch instructions
 - information on equipment capacity and operating parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2039 Operate a frying process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a frying process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a frying process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in frying processing area	1.1 Confirm frying oil and product are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the frying process for operation	2.1 Fit and adjust machine components and related attachments to meet operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the frying process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the frying process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2039 Operate a frying process	FDFOP2039A Operate a frying process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2039 Operate a frying process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a frying process on at least one occasion, including:

- accessing workplace information to identify frying requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary oil type to meet product frying requirements, product to be processed and services
- preparing materials as required prior to frying
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and valves are correctly positioned for oil transfer and processing stages
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the frying process and equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - product throughput/belt speeds
 - oil levels/temperatures
 - operation of oil filtration process
 - visual appearance of product, including breaking open to inspect
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of frying, including optimal frying conditions and the role of oil filtration
- basic operating principles of equipment used in the operation of a frying process, including:
 - main equipment components
 - the configuration of valves, pumps and pipework
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- the flow of the frying process and the effect of product output on downstream processes
- quality characteristics to be achieved by the frying process
- effect of product and oil quality characteristics on the frying process, final product and shelf-life
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the frying process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the frying process and related control measures
- common causes of variation related to the frying process and corrective action required
- work health and safety hazards and controls, including the fire suppression system and procedures to follow if temperatures exceed the specified range
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage

- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the frying process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the frying process, including procedures for recycling oil and for disposing of spent oil, and the consequences of incorrect disposal
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the frying process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - in-line frying equipment and related equipment and services
 - frying oil suited to product type and product to be fried
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment as required
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2040 Operate a heat treatment process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a heat treatment process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a heat treatment process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in heat treatment processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the heat treatment process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the heat treatment process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that temperature specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental working procedures
4. Shut down the heat treatment process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2040 Operate a heat treatment process	FDFOP2040A Operate a heat treatment process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2040 Operate a heat treatment process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a heat treatment process on at least one occasion, including:

- accessing workplace information to identify heat treatment requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- preparing materials
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the heat treatment process and equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - time and temperature
 - pressure
 - flow rates
 - flow diversion
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- cleaning and sanitising equipment
- completing workplace records
- maintaining work area to meet housekeeping standards
- controlling related holding and cooling stages according to workplace procedures
- using process control systems according to workplace procedures
- following relevant work health and safety procedures.
-

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of heat treatment, including the effect of heat treatment on product and on microbiological characteristics
- the relationship between time, temperature and pressure in the heat treatment process, including associated holding and cooling profiles according to product requirements
- basic operating principles of equipment used in the heat treatment process, including:
 - main equipment components
 - types and characteristics of heating mediums used
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- the flow of the heat treatment process and the effect of product output on downstream processes
- quality characteristics required of the heat-treated product
- effect of raw material characteristics on the heat treatment process, including variation in viscosity/texture, microbial load and acidity
- heat treatment requirements for food to be treated, including low and/or high acid foods
- operating requirements and parameters for the heat treatment process, and corrective action required where operation is outside specified operating parameters
- typical equipment faults for the heat treatment process and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the heat treatment process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures
- common causes of variation in the operation of the heat treatment process and corrective action required

- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the heat treatment process
- procedures and responsibility for reporting production and performance information
- cleaning and sanitation procedures required for heat treatment process
- environmental issues and controls relevant to the heat treatment process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - heat treatment process and related equipment and services
 - materials to be heat treated
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2041 Operate a mixing or blending and cooking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a mixing or blending and cooking process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a mixing or blending and cooking process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in mixing/blending and	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
cooking processing area	1.2 Confirm ingredients are available to meet operating requirements 1.3 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare mixing/blending and cooking equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the mixing/blending and cooking process	3.1 Introduce ingredients and additives in the required quantities and sequence to meet recipe specifications 3.2 Start, operate and monitor the process for variation in operating conditions 3.3 Monitor the process to confirm that specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Transfer mix to required production or storage location 3.6 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the mixing/blending and cooking process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2041 Operate a mixing or blending and cooking process	FDFOP2041A Operate a mixing or blending and cooking process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2041 Operate a mixing or blending and cooking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a mixing or blending and cooking process on at least one occasion, including:

- accessing workplace information to identify recipe requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- sequencing ingredient addition to meet recipe specifications, including manual addition and/or operating bulk materials transfer and automatic addition equipment
- starting, monitoring and adjusting processing equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - time and temperature
 - agitation settings
 - weights
 - flow rates
 - flow diversion
 - characteristics of the mix, including colour, viscosity, density and consistency

- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of heat sterilisation and effect on physical, chemical, microbiological and organoleptic characteristics of the cooked product
- the flow of the mixing or blending and cooking process and the effect of product output on downstream processes
- basic operating principles of equipment used in the mixing/blending and cooking process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - calibration schedules for scales and related weighing/measuring equipment
- services required mixing/blending and cooking process and action to take if services are not available
- quality characteristics and conditioning required of ingredients used, and their role in the product, including reconstituting dry ingredients and bringing ingredients to a required temperature
- effect of ingredient quality/condition on the process, including variables including temperature, viscosity/texture, microbial load and acidity quality
- heat treatment requirements for low and/or high acid foods as appropriate to production requirements
- stages and changes that occur during the blending and heat treatment stages
- quality requirements of the cooked product, including chemical, textural and flavour profiles
- relationship between time and temperature in the cooking process
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- procedures for requisitioning, receiving and returning ingredients from stores

- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation in the mixing/blending and cooking process and corrective action required
- contamination/food safety issues associated with mixing and blending and related control measures
- work health and safety hazards and controls relevant to the mixing/blending and cooking process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the mixing/blending and cooking process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- food safety requirements when preparing products
- packaging requirements and procedures
- cleaning and sanitation procedures required for the mixing/blending and cooking process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - mixing/blending and cooking process and related equipment and services
 - ingredients to be cooked
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch/recipe instructions
 - specifications, control points and operating parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2042 Operate a drying process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a drying process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a drying process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the drying process for operation	1.1 Confirm availability of materials to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Enter processing and operating parameters as required to meet safety and production requirements 1.4 Check and adjust equipment performance as required to maintain specifications 1.5 Carry out pre-start checks according to work health and safety and operating procedures
2. Operate and monitor the drying process	2.1 Start, operate and monitor the process for variation in operating conditions 2.2 Monitor the process to confirm that specifications are met 2.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 2.4 Follow and apply workplace housekeeping and environmental procedures
3. Shut down the drying process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process according to work health and safety and operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures 3.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements

Skill	Description
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2042 Operate a drying process	FDFOP2042A Operate a drying process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2042 Operate a drying process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a drying process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- preparing materials as required
- conducting pre-start checks, including:
 - inspecting equipment condition, including checking belts, chains, screens, seals and valves, and filters, to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - temperatures
 - moisture content
 - air flow
 - throughput
 - time/speed
 - pressure/vacuum

- product characteristics
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results or non-compliance
- responding to and/or reporting equipment failure within level of responsibility
- reporting and/or recording corrective action as required
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- preparing equipment for cleaning
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the purpose and basic principles of the drying process, including the stages that occur during the drying process and the effect on product structure of each stage
- basic operating principles of equipment used in the drying process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required to operate the drying process and action to take if services are not available
- quality characteristics to be achieved by the drying process
- materials preparation requirements and the effect of variation on the process
- the flow of the drying process and the effect of outputs on downstream processes
- operating requirements and parameters of the drying process, and corrective action required where operation is outside specified operating parameters
- typical equipment faults related to the operation of the drying process and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the drying process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures

- common causes of variation, including air temperature, air velocity, humidity and pressure, and corrective actions required if these are out-of-specification
- work health and safety hazards and controls, including limitations of protective clothing and equipment relevant to the operation of the drying process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the drying process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the drying process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the drying process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - drying process and related equipment and services
 - product to be dried
 - sampling schedules and test procedures and equipment as required
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule, batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2043 Operate an homogenising process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a homogenising process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a homogenising process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare homogenising process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the homogenising process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down homogenising equipment	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2043 Operate an homogenising process	FDFOP2043A Operate an homogenising process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2043 Operate an homogenising process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated an homogenising process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm the homogenising process remains within specification, including:
 - temperature
 - pressure
 - throughput
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment

- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of homogenising
- basic operating principles of equipment used in the operation of a homogenising process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- effect of raw materials on homogenisation, including variables, including solids (brix), acidity, temperature, consistency and colour on process outcomes
- quality requirements to be achieved by the homogenisation process
- the flow of the homogenising process and the effect of product output on downstream processes
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults related to the homogenising process and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- techniques used to monitor the homogenising process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process, and the related procedures and recording requirements
- common causes of variation in the operation of the homogenising process and corrective action required
- work health and safety hazards and controls relevant to the operation of the homogenising process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the homogenising process

- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the homogenising process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the operation of the homogenising process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - homogenisation process and related equipment and services
 - materials to be homogenised
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2044 Operate a retort process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a retort process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a retort process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Confirm materials are available to meet operating requirements 1.3 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the retort equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the retort process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the retort process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2044 Operate a retort process	FDFOP2044A Operate a retort process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2044 Operate a retort process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a retort process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services, including confirming container coding, and treating or confirming availability of treated cooling water
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the cooking and cooling process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - time
 - temperature
 - pressure at each stage
- cooling, cleaning and handling post-treated containers to meet requirements
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures as required to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of heat treatment and retort process, including:
 - relationship between time and temperature in the retort process
 - changes and requirements of each stage, including cooking, cooling and post-treatment container handling
- the purpose and requirements of container coding
- basic operating principles of equipment required for operating a retort process, including main equipment components, including:
 - thermometers, chart recorder, temperature control system, clock and pressure gauges
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- the flow of the retort process and the effect of product output on downstream processes
- quality characteristics required of the retorted product
- effect of raw material characteristics on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults for a retort process operation and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- techniques used to monitor the retort process, including inspecting, measuring and testing as required by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures, including both the risks of contamination related to processing and to post-processing handling of containers
- common causes of variation and corrective action required, including the effects of variables, including container size, product particulates, pH, water activity, time/temperature and pressure on process outcomes

- work health and safety hazards and controls relevant to operating a retort process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for operating a retort process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for operating a retort process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - retort process and related equipment and services
 - materials to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2045 Operate pumping equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate and monitor pumping equipment.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of pumping and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare pumps for operation	1.1 Confirm pumps and related equipment are available to meet operating requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Wear appropriate personal protective clothing and ensure correct fit 1.3 Carry out pre-start checks on pumps and related equipment according to work health and safety and operating procedures 1.4 Select appropriate settings to meet safety and production requirements 1.5 Monitor and maintain condition of pumps and related equipment, and identify and report maintenance requirements according to workplace reporting requirements
2. Monitor pump operation	2.1 Start and monitor pumps and related equipment to identify variation in operating conditions 2.2 Take corrective action to maintain pump operation within equipment capacity and operating parameters
3. Complete pump operation	3.1 Prepare pumps for cleaning and/or maintenance according to work health and safety and food safety requirements 3.2 Conduct work in accordance with workplace environmental guidelines 3.3 Maintain the work area according to workplace procedures 3.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	Monitor and interpret production and process control indicators and data

Skill	Description
	Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2045 Operate pumping equipment	FDFOP2045A Operate pumping equipment	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2045 Operate pumping equipment

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated pumping equipment on at least one occasion, including:

- accessing workplace information to identify pumping requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of materials to be pumped and necessary services
- conducting pre-start checks, including:
 - inspecting pump flanges, gaskets and seals to identify any signs of wear
 - checking related valve assemblies to identify any signs of leaks
 - cancelling isolation or lock-outs (where pumps have variable settings that involve selecting appropriate settings and confirming that related pipework is correctly configured for pumping requirements)
- monitoring and adjusting pump operation, including identifying variation in amperage and adjusting pump speeds/flow rates to meet pumping requirements
- monitoring supply and flow of materials to and from the pump
- following isolation and lock-out/tag-out procedures to take pumps and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- responding to and/or reporting pump equipment failure within level of responsibility
- locating stop and reset functions on pumps
- maintaining work area to meet housekeeping standards
- operating pumps using process control systems according to workplace procedures
- cleaning pumps and related equipment according to workplace procedures
- following relevant work health and safety requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic operating principles of pumps and related equipment, including:
 - main pump components
 - status and purpose of guards
 - pump system configuration, including valves, taps and pipework
- the effect of pumping system design on operating performance, including flow resistance, pressure and head
- operating capacities of pumps used in the work area, including different pump types to perform pumping operations
- effect of raw material characteristics on pump performance, including variables that include soluble solids, temperature and viscosity
- effect of pump operating parameters on product/materials pumped
- corrective action required where pump operation is outside specified operating parameters
- typical equipment faults and related causes relevant to operating pumping equipment, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
 - services required
- isolation, lock-out and tag-out procedures and responsibilities required for operating pumping equipment
- work health and safety hazards and controls relevant to operating pumping equipment
- procedures and responsibility for reporting problems
- environmental issues and controls, including action required in the event of significant leaks or spills
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning procedures required for operating pumping equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - pumps, related equipment and services
 - materials to be pumped
 - routine preventative maintenance schedule as required
 - cleaning procedures, materials and equipment

- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2046 Operate a production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a production process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a production process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and workplace housekeeping and environmental procedures
4. Shut down the process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2046 Operate a production process	FDFOP2046A Operate a production process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2046 Operate a production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a production process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures

- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the production process
- basic operating principles of equipment required to operate the production process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the process
- quality requirements of materials and effect of variation on process performance
- operating requirements, parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults of the production process and related causes, including recognition of signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures
- common causes of variation for operating a production process and corrective action required
- work health and safety hazards and controls, including limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the production process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the production process, including waste/rework collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the production process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - materials to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2047 Operate a portion saw

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate and monitor a portion saw.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a portion saw.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare portion saw for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Ensure safety guards and covers are in place 2.3 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate the portion saw to achieve required outcome	3.1 Position portions to be cut according to operational requirements 3.2 Pass portion over the blade and cut to meet specifications 3.3 Monitor equipment to identify variation in operating conditions and report maintenance requirements 3.4 Monitor quality and accuracy of cuts to confirm that specifications are met 3.5 Inspect and clean equipment according to workplace procedures and food safety requirements 3.6 Follow and apply workplace housekeeping and environmental procedures 3.7 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	Monitor and interpret production and process control indicators and data

Skill	Description
	Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2047 Operate a portion saw	FDFOP2047A Operate a portion saw	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2047 Operate a portion saw

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a portion saw on at least one occasion, including:

- accessing workplace information to identify portion requirements
- selecting, fitting and using personal protective clothing and/or equipment, including use of mesh gloves or similar protective clothing
- confirming supply of necessary poultry pieces, including inspecting and removing pieces of unacceptable quality
- conducting pre-start checks, including:
 - inspecting condition of the portion saw to identify blade sharpness and other signs of wear
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and all safety guards are in place and operational
 - ensuring that lighting, guarding and signage around the saw are in position
- collecting portions to be cut
- positioning portions to allow the blade to pass cleanly through
- achieving cut accuracy to meet specifications and workplace standards with minimal waste
- identifying faulty equipment operation and/or blunt blades, and taking corrective action
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take the portion saw and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- inspecting and cleaning the portion saw and reporting maintenance issues
- maintaining work area to meet housekeeping standards

- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- quality specifications and characteristics required of portioned product
- portion saw operating procedures, including correct positioning of guards, lighting and safe work practices when working with the saw
- work health and safety hazards and controls, including limitations of protective clothing and equipment relevant to the work process
- contamination/food safety risks associated with the automated cutting process and related control measures, including hygiene and sanitation requirements when handling product
- grading/downgrading specifications for portioned product
- typical equipment faults and related causes for operating a portion saw, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- isolation, lock-out and tag-out procedures and responsibilities for operating a portion saw
- procedures and responsibility for reporting production and performance information
- procedures for cleaning and for reporting maintenance requirements for operating a portion saw
- waste handling requirements and procedures for operating a portion saw
- routine maintenance procedures required for operating a portion saw.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment, including a mesh glove
 - portion saw and related equipment and services
 - carcasses/pieces to be cut into portions
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2048 Pre-process raw materials

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, monitor and shut down machinery used for the preparation of raw materials.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of machinery used for the preparation of raw materials.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare for pre-processing	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the pre-processing process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that temperature specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and workplace housekeeping and environmental procedures
4. Shut down the pre-processing process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2048 Pre-process raw materials	FDFOP2048A Pre-process raw materials	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2048 Pre-process raw materials

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has pre-processed raw materials on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks on machinery and equipment required to pre-process raw materials, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- loading or transferring materials to pre-processing equipment
- starting, operating and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records

- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of pre-processing raw materials
- basic operating principles of equipment used in the pre-process raw materials, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- the flow of the process and the effect of product output on downstream processes
- quality characteristics to be achieved at the pre-processing stage
- effect of raw material characteristics on process performance
- operating requirements and parameters of machinery used in the pre-processing of raw materials, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor the process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with pre-processing and related control measures
- common causes of variation in the pre-processing of raw materials and corrective action required
- work health and safety hazards and controls, including limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for machinery and equipment used for the preparation of raw materials
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for pre-processing raw materials.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - raw materials
 - workplace records
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - production schedule and batch instructions
 - quality criteria, specifications and inspection procedures
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2049 Operate a reduction process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a reduction process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a reduction process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Confirm materials are available to meet operating requirements 1.3 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the reduction equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to operating procedures 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the reduction process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that particle size and flour extraction rates meet production specifications 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Segregate by-product generated from the reduction process and transfer to designated storage area according to food safety requirements 3.5 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the reduction process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2049 Operate a reduction process	FDFOP2049A Operate a reduction process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2049 Operate a reduction process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a reduction process on at least one occasion, including:

- accessing workplace information to identify reduction process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that related equipment is clean and correctly configured for reduction process requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting reduction process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - correct product type/quantity
 - roll releases
 - even spread of feed across rolls
 - mill balance
 - even grind/correct particle size
- monitoring supply and flow of materials to and from the reduction process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take reduction process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the reduction process
- basic operating principles of equipment for the reduction process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the reduction process and the effect of outputs on downstream flour milling processes
- quality characteristics to be achieved by the reduction process
- quality requirements of materials and effect of variation on reduction process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes associated with operating a reduction process, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the reduction process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the reduction process and the related procedures and recording requirements
- contamination/food safety risks associated with the reduction process and related control measures
- common causes of variation associated with operating a reduction process and corrective action required
- work health and safety hazards and controls relevant to operating a reduction process, including limitations of protective clothing and equipment relevant to the work process

- requirements of different shutdowns as appropriate to the reduction process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for operating a reduction process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the reduction process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required to operate a reduction process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - reduction process and related equipment and services
 - stock to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2050 Operate a separation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a separation process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a separation process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the separation process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters as required to meet safety and production requirements 2.3 Check equipment performance and adjust as required according to operating procedures 2.4 Carry out pre-start checks according to work health and safety and operating requirements
3. Operate and monitor the separation process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the separation process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating requirements 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2050 Operate a separation process	FDFOP2050A Operate a separation process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2050 Operate a separation process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a separation process on at least one occasion, including:

- accessing workplace information to identify separation processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - confirming that the correct bowl is fitted
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs as required
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting separation process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - separation speed
 - solids in in-feed and out-feed streams (this is typically done by in-line refractometers, Baume tests and spin tests)
 - flow rates
 - time/temperatures
 - pressures
 - air/water/oil levels

- condition of seals and valves
- discharge/desludging
- monitoring supply and flow of materials to and from the separation process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- shutting down separation process equipment in response to emergency situation
- following isolation and lock-out/tag-out procedures as required to take separation process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- cleaning and sanitising equipment
- completing workplace records as required
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the separation process, including stages and changes that occur during the separation process
- basic operating principles of equipment for the separation process, including:
 - safety hazards associated with separation equipment and the implications of interchanging parts/incorrect bowl balance
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
 - services required for operation of separation equipment used in the workplace
- the flow of the separation process and the effect of product output on downstream processes
- impact of in-feed quality and concentration levels on the separation process
- quality characteristics and uses of separation process outputs
- methods used to monitor the separation process, including inspecting, measuring and testing in-feed and out-feed solids, and other tests as required by the process
- inspection or test points (control points) in the separation process and the related procedures and recording requirements
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- common causes of variation and corrective action required, including how variation in temperature and solids affects the process

- spoilage and other food safety risks associated with separation, and related control measures
- work health and safety hazards and controls, including limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for operating the separation process
- cleaning and sanitation procedures required for operating the separation process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the operation of the separation process, including handling of effluent
- basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - separation process and related equipment and services
 - materials required for the separation process
 - sampling schedules and test procedures and equipment as required
 - routine preventative maintenance schedule as required
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, batch/recipe instructions
 - information on equipment capacity and operating parameters
 - production schedule and batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2051 Operate a spreads production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a spreads production process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a spreads production process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the spreads equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to operating procedures 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the spreads process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the spreads process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2051 Operate a spreads production process	FDFOP2051A Operate a spreads production process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2051 Operate a spreads production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a spreads production process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - temperature
 - work input
 - throughput
 - pressures
 - crystal formation
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- follow isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of spreads preparation, including:
 - crystallisation
 - relationship between stages of crystal formation, work input and temperature
 - stages involved in the process
- basic operating principles of equipment for the spreads production process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- services required for the spreads production process and action to take if services are not available
- the flow of the spreads production process and the effect of outputs on downstream processes
- quality characteristics required of the finished product
- quality requirements of oil or emulsion for processing and the effect of variation on process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes of the spreads production process, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the spreads production process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the process and related control measures
- common causes of variation associated with a spreads production process and corrective action required
- work health and safety hazards and controls relevant to operating the spreads production process

- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities for the spreads production process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures relevant to operating the spreads production process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - spread processing and related equipment and services
 - emulsion or oil to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2052 Operate a chocolate tempering process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a chocolate tempering process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a chocolate tempering process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm chocolate for tempering is available to meet operating requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the tempering equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to operating procedures 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the tempering process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Conduct and interpret temper tests and make required adjustments 3.3 Monitor the process to confirm that specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the tempering process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace requirements 4.4 Maintain workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2052 Operate a chocolate tempering process	FDFOP2052A Operate a chocolate tempering process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2052 Operate a chocolate tempering process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a chocolate tempering process on at least one occasion, including:

- accessing workplace information to identify tempering process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting tempering process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - setting pump speeds
 - checking temperature/zone settings
 - checking chocolate temperatures
- monitoring supply and flow of materials to and from the tempering process and equipment operation to confirm process remains within specification
- conducting temper test, interpreting results and determining adjustments
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take tempering process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- conducting routine maintenance according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the tempering process, including:
 - basic understanding of the crystallisation behaviour of cocoa fat
 - relationship between crystal forms and melting points/temperatures
 - process stages, including heating, cooling, agitating, reheating and effect of each of these on outcomes
- basic operating principles of equipment for the tempering process, including:
 - main equipment components
 - temperature zones
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- services required for the chocolate tempering process and action to take if services are not available
- the flow of the tempering process and the effect of outputs on downstream processes
- quality characteristics required of chocolate for tempering and the effect of variation on tempering process performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the tempering process, including temper test procedures and the significance of results for tempering process adjustments
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination/food safety risks associated with the tempering process and related control measures
- common causes of variation related to the chocolate tempering process and corrective action required

- work health and safety hazards and controls related to the chocolate tempering process
- requirements of different shutdowns as appropriate to the tempering process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities relevant to the chocolate tempering process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the tempering process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for operating the chocolate tempering process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - process and related equipment and services
 - chocolate to be tempered
 - tempermeter
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - recipe/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2053 Operate a washing and drying process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a washing and drying process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a washing and drying process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm raw materials are available to meet production requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to operating procedures 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the washing and drying process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Inspect and wash raw materials to meet workplace specifications 3.3 Transfer washed materials to drying stage according to workplace procedures 3.4 Dry materials to specification 3.5 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.6 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the washing and drying process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2053 Operate a washing and drying process	FDFOP2053A Operate a washing and drying process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2053 Operate a washing and drying process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a washing and drying process on at least one occasion, including:

- accessing workplace information to identify production requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary raw materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting washing and drying equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - operation of dosing equipment
 - tank/bath or flume water levels
 - related equipment operation (including pumps/conveyors)
 - immersion of raw materials
 - temperatures
 - water quality
 - flow rates
 - drying times

- weight (before and after drying)
- monitoring supply and flow of raw materials to the wash process and from the drying process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the washing and drying process, including water quality, the role of sanitisers in the washing process, and of drying technology, including the use of centrifugal force in a drying process
- basic operating principles of equipment used in the washing and drying process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- services (principally water) required and action to take if services are not available
- the flow of this process and the effect of outputs on downstream processes
- quality characteristics to be achieved by both the washing and drying stages, including consequences of out-of-specification moisture levels on further processing and final product
- quality requirements of raw materials and the effect of variation on process performance, including how variation in microbial load can affect the washing and drying process
- operating requirements, parameters and corrective action required where washing and drying operation is outside specified operating parameters
- typical equipment faults of the washing and drying process and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the washing and drying process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements

- contamination/food safety risks associated with the process and related control measures
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to operating a washing and drying process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities relevant to operating a washing and drying process
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures for operating a washing and drying process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - washing and drying equipment and services, including water and sanitiser
 - raw materials to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications and inspection or control points
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2054 Operate a water purification process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a water purification process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a water purification process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and sanitising requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the water purification equipment and process for operation	2.1 Complete batch records or process documentation according to workplace procedures 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust as required 2.4 Carry out pre-start checks according to operating procedures
3. Operate and monitor the water purification process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Identify hazards and take corrective action according to operating procedure and work health and safety requirements 3.3 Monitor the process to confirm that water purification specifications are met 3.4 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.5 Follow and apply work cleaning and environmental working procedures
4. Shut down the water purification process	4.1 Identify the appropriate shutdown procedure and implement 4.2 Identify and report maintenance requirements according to operating procedures 4.3 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret workplace and standard operating procedures relevant to job role

Skill	Description
	Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2054 Operate a water purification process	FDFOP2054A Operate a water purification process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2054 Operate a water purification process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a water purification process on at least one occasion, including:

- accessing workplace information to identify water purification process requirements
- selecting, fitting and using personal protective clothing and/or equipment
- responding appropriately to hazards, including chemical spills
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for water purification process requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting water purification process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - flow rates
 - pressure
 - operation of dosing equipment
 - alarms
- monitoring supply and flow of materials to and from the water purification process
- taking corrective action in response to out-of-specification results
- maintaining a purification system free of physical, chemical and biological contaminants

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take water purification process and related equipment off-line in preparation for cleaning/back-flushing and/or maintenance within level of responsibility
- carrying out cleaning, sanitising, regenerating and back-flushing
- completing workplace records
- maintaining work area to meet housekeeping standards
- following relevant work health and safety procedures, including responding appropriately to hazards, including chemical spills.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the water purification process, including methods used to purify water appropriate to workplace requirements
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- services required and action to take if services are not available
- the flow of the water purification process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the water purification process
- quality requirements of inputs to the purification process and the effect of variation on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including:
 - following troubleshooting and problem-solving guidelines
 - recognising signs and symptoms of faulty equipment and early warning signs of potential problems
- basic operating principles of process control as appropriate, including the relationship between control panels and systems and the physical equipment
- methods used to monitor the water purification process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the water purification process and the related procedures and recording requirements
- Good Manufacturing Practice (GMP)/food safety requirements (as appropriate) associated with the purification process and related control measures
- common causes of variation and corrective action required

- work health and safety hazards and controls
- requirements of different shutdowns as appropriate to the water purification process and workplace production requirements, including emergency and routine shutdowns
- isolation, lock-out and tag-out procedures and responsibilities
- cleaning and sanitation procedures
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the water purification process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - washing and drying equipment and services, including water and sanitiser
 - raw materials to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications and inspection or control points
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2055 Freeze dough

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to freeze, store and thaw dough.

This unit applies to individuals who work in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to freeze dough.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to freeze dough	1.1 Identify freezing requirements of dough 1.2 Set freezers to meet parameters for snap freezing and for storage 1.3 Ensure frozen dough meets freezing specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Store frozen dough	2.1 Confirm storage conditions retain quality characteristics of frozen dough 2.2 Monitor freezing processes to ensure that product meets food safety and quality requirements
3. Thaw frozen dough	3.1 Ensure thawed dough meets food safety and quality requirements 3.2 Identify, rectify and/or remove unacceptable dough 3.3 Dispose of waste according to workplace procedure 3.4 Conduct work in accordance with workplace environmental guidelines 3.5 Maintain workplace housekeeping standards for freezing, storing and thawing dough

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Read a thermometer or temperature gauge - Estimate and calculate storage and thawing times
Reading	Identify requirements from basic instructions and procedures
Writing	Maintain basic records and observations on forms
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures - Take steps to develop skills and knowledge of products, rotation and storage patterns
Interact with others	- Communicate and report operational and safety information to relevant persons - Select and use appropriate terminology when communicating with personnel

Skill	Description
	Participate in conversations relevant to role by responding and explaining as required
Get the work done	- Make routine decisions relating to freshness and handling of product - Recognise and respond to non-conforming product

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2055 Freeze dough	FDFOP2055A Freeze dough	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2055 Freeze dough

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has prepared to freeze, stored and thawed dough on at least one occasion, including:

- accessing freezing requirements for dough type
- setting equipment to meet the parameters for snap freezing and for storing dough
- transferring dough to snap freezer (transfer method must ensure minimal damage to dough structure, which is particularly critical where frozen dough is already proofed)
- monitoring equipment to confirm that freezing parameters are met
- packaging snap frozen dough for freezer storage as required to prevent moisture loss
- transferring snap frozen, packaged dough to frozen storage
- thawing dough as required for use
- maintaining workplace records as required
- maintaining work area to meet housekeeping standards
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- basic principles of freezing dough, including what occurs to dough during snap freezing and storage stages
- freezing equipment used, freezing capacity and the effect of freezing method on product
- different handling requirements of made-up and proofed dough to preserve the dough structure
- purpose and characteristics of packaging liners used to pack frozen dough
- procedures for maintaining temperature parameters of freezing equipment, including procedures to be followed when loading and removing dough to preserve temperature conditions

- storage patterns to make efficient use of space, allow for product rotation and minimise temperature fluctuations
- food safety issues that can result from temperature abuse
- the significance of timeliness when both freezing and thawing dough
- optimal storage times for frozen dough
- the significance of variables, including dough type and size, on freezing and thawing processes
- procedures for efficiently thawing frozen product, and the consequences of slow thawing
- the effect of freezing/thawing on the quality of the final product
- inspections/control points used to confirm that product meets quality requirements and related monitoring requirements
- causes of variation and corrective action required when freezing, storing and thawing dough
- work health and safety hazards and controls related to freezing, storing and thawing dough
- waste handling and cleaning requirements and procedures for freezing, storing and thawing dough.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing, equipment, and material safety data sheets (MSDS)
 - freezing equipment
 - packaging materials and liners
 - dough
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on relevant freezing, storing and thawing requirements, safe work practices, food safety, quality and environmental requirements
 - product specifications and related inspection/control points.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2056 Operate a freezing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a freezing process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a freezing process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the freezing process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the freezing process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the freezing process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2056 Operate a freezing process	FDFOP2056A Operate a freezing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBOPR2056 Operate a freezing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a freezing process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- preparing materials
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting the freezing process and equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - tunnel and product temperatures
 - throughput
 - removal of frozen waste product from equipment
 - visually inspecting product
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results
- correctly following procedures to defrost tunnels

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of freezing, including the changes that occur to product during freezing
- basic operating principles of equipment used in the operation of a freezing process, including:
 - main equipment components
 - status and purpose of guards
 - basic principles and operation of refrigeration system
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- the flow of the freezing process and the effect of product output on downstream processes
- quality characteristics to be achieved by the freezing process
- effect of raw material characteristics on the freezing process
- operating requirements and parameters of the freezing process and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- contamination and food safety risks associated with the freezing process and related control measures
- common causes of variation in the operation of the freezing process and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities required for the operation of the freezing process
- procedures and responsibility for reporting production and performance information relevant to the freezing process

- environmental issues and controls relevant to the freezing process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the freezing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - freezing process and related equipment and services
 - materials to be frozen
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - production schedule and batch instructions
 - specifications, control points and processing parameters
 - information on equipment capacity and operating parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2057 Operate a membrane process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a membrane process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a membrane process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the membrane equipment and process for operation	2.1 Fit machine components and related attachments and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the membrane process	3.1 Start, operate and monitor the process according to work health and safety and operating procedures 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the membrane process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2057 Operate a membrane process	FDFOP2057A Operate a membrane process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2057 Operate a membrane process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a membrane process on at least one occasion, including:

- accessing workplace information to identify membrane processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start check, including:
 - inspecting equipment/membrane condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment, including pumps, valves and pipework, are clean and correctly configured for membrane processing requirements
 - sensors and controls are correctly positioned
 - any scheduled maintenance has been carried out
 - all safety guards are in place and operational
- starting, operating, monitoring and adjusting membrane processing equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including monitoring:
 - temperatures
 - flow rates
 - total solids
 - pressure/vacuum
- monitoring supply and flow of materials to and from the membrane process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment

- following isolation and lock-out/tag-out procedures to take membrane processing and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- following procedures to clean membranes
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of membrane processing, including:
 - components of milk
 - particle size of each component
 - effect on these components of membrane processing
 - methods used to achieve this outcome
- basic operating principles of membrane processing equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
 - material composition of membranes used in the workplace, and related operating, cleaning and storage requirements
- the flow of the membrane process, including the different processing streams and the effect of the membrane process outputs on downstream processes
- quality characteristics required of the membrane processing outputs
- the effect of variation in raw material characteristics on membrane processing performance
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters, including the effect of variation in processing parameters, including temperature, pressure, total solids and flow rates on membrane process performance
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor membrane processing, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the process and the related procedures and recording requirements
- contamination and food safety risks associated with the process and related control measures

- common causes of variation and corrective action required when operating a membrane process
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to membrane processing and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage and shutdown
- cleaning and sanitation requirements required for operating a membrane process
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting membrane processing production and performance information
- environmental issues and controls relevant to membrane processing, including waste collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - membrane processing and related equipment and services
 - materials required for membrane processing
 - sampling schedules and test procedures and equipment
 - cleaning and sanitation procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements, stock flow systems, production schedules, batch/recipe instructions
 - information on equipment capacity and operating parameters
 - production schedule and batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2058 Operate a holding and storage process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a holding and storage process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a holding and storage process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the holding and storage equipment and process for operation	2.1 Fit machine components and related attachments, and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the holding and storage process	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the holding and storage process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace requirements 4.4 Maintain workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2058 Operate a holding and storage process	FDFOP2058A Operate a holding and storage process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2058 Operate a holding and storage process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a holding and storage process on at least one occasion, including:

- accessing workplace information to identify requirements for the holding and storage process
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services for the holding and storage process
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting holding and storage process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - time/temperature
 - flow rates
 - agitation speed
 - equipment condition and performance
- monitoring supply and flow of materials to and from the holding and storage process
- taking corrective action in response to out-of-specification results
- responding to and/or reporting equipment failure within level of responsibility

- locating emergency stop functions on equipment
- following isolation and lock-out/tag-out procedures to take holding and storage process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning equipment according to workplace procedures
- following relevant work health and safety guidelines.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the holding and storage process, including the importance of stock rotation
- basic operating principles of equipment for the holding and storage process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- the flow of the holding and storage process and the effect of product output on downstream processes
- contamination and food safety risks associated with the holding and storage process and related control measures
- quality characteristics to be achieved by the holding and storage process, including organoleptic characteristics of the product
- effect of raw material characteristics on the holding and storage process
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes related to the storage and holding process, including signs and symptoms of faulty equipment and early warning signs of potential problems
- techniques used to monitor the holding and storage process, including inspecting, measuring and testing by the process
- common causes of variation for the holding and storage process and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the holding and storage process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities for operating a holding and storage process

- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste collection and handling procedures
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the holding and storage process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - holding and storage process and related equipment and services
 - materials required for a holding/storage process
 - sampling schedules and test procedures and equipment
 - routine preventative maintenance schedule as required
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - stock flow systems, production schedules and batch/recipe instructions
 - specifications, control points and processing parameters
 - information on equipment capacity and operating parameters
 - production schedule and batch instructions
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2059 Operate a continuous freezing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a continuous freezing process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a continuous freezing process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm materials are available to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements and status according to work health and safety and food safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the freezing equipment and process for operation	2.1 Fit machine components and related attachments, and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Monitor the freezing process operation	3.1 Start, operate and monitor the process for variation in operating conditions 3.2 Monitor the process to confirm that specifications are met 3.3 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.4 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the freezing process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2059 Operate a continuous freezing process	FDFOP2059A Operate a continuous freezing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2059 Operate a continuous freezing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a continuous freezing process on at least one occasion, including:

- accessing workplace information to identify processing requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections to confirm process remains within specification, including:
 - flow rates
 - churn speed
 - time/temperature
 - ingredient addition systems
 - pressures
 - equipment condition and performance
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results

- responding to and/or reporting equipment failure within level of responsibility
- locating emergency stop functions on equipment
- follow isolation and lock-out/tag-out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the continuous freezing process, including the stages that occur during the churning and freezing process and the required physical and microstructure of the product
- basic operating principles of equipment required to operate a continuous freezing process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- services required to operate a continuous freezing process and action to take if services are not available
- the flow of the freezing process and the effect of outputs on downstream processes
- additives and ingredients used in the continuous freezing process and their role in the product
- quality characteristics to be achieved by the freezing process
- quality requirements of materials/ingredients and effect of variation on process performance
- operating requirements and parameters and corrective action required where operation of the continuous freezing process is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the production process, including inspecting, measuring and testing by the process
- inspection or test points (control points) in the continuous freezing process operation and the related procedures and recording requirements
- contamination/food safety risks associated with the continuous freezing process and related control measures
- common causes of variation in the operation of a continuous freezing process and corrective action required

- work health and safety hazards and controls relevant to the operation of a continuous freezing process, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the continuous freezing process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities required for the operation of a continuous freezing process
- procedures and responsibility for reporting production and performance information of the continuous freezing process
- environmental issues and controls relevant to the continuous freezing process, including waste/rework collection and handling procedures related to the process
- basic operating principles of continuous freezing process control, including the relationship between control panels and systems and the physical equipment
- cleaning procedures required for the continuous freezing process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - freezing process and related equipment and services
 - materials/ingredients to be processed
 - sampling schedules and test procedures and equipment
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedules and batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2060 Operate an automated cutting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down an automated cutting process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of an automated cutting process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Confirm carcasses/pieces are available according to production requirements 1.2 Identify and confirm cleaning and maintenance requirements and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	status according to work health and safety and food safety requirements 1.3 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the automated cutting equipment and process for operation	2.1 Fit machine components and related attachments, and adjust to meet operating requirements 2.2 Enter processing and operating parameters to meet safety and production requirements 2.3 Check equipment performance and adjust according to production requirements 2.4 Carry out pre-start checks according to work health and safety and operating procedures
3. Operate and monitor the automated cutting process	3.1 Inspect carcasses/pieces to confirm that quality requirements are met 3.2 Hang carcasses/pieces to meet production pace 3.3 Start, operate and monitor the process for variation in operating conditions 3.4 Monitor the process to confirm that temperature specifications are met 3.5 Identify, rectify and report out-of-specification equipment, product or process outcomes according to workplace requirements 3.6 Follow and apply workplace housekeeping and environmental procedures
4. Shut down the automated cutting process	4.1 Identify the appropriate shutdown procedure 4.2 Shut down the process according to work health and safety and operating procedures 4.3 Identify and report maintenance requirements according to workplace procedures 4.4 Maintain workplace records according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2060 Operate an automated cutting process	FDFOP2060A Operate an automated cutting process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2060 Operate an automated cutting process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated an automated cutting process on at least one occasion, including:

- accessing workplace information to identify cutting requirements
- selecting, fitting and using personal protective clothing and/or equipment
- confirming supply of necessary carcasses/pieces and services, including inspecting and removing carcasses/pieces of unacceptable quality
- conducting pre-start checks, including:
 - inspecting equipment condition to identify blade sharpness and other signs of wear
 - selecting appropriate settings and/or related parameters according to bird size/type
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for cutting process requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place, and operational and running
 - trialling cut to confirm accuracy/positioning where required
- starting, operating, monitoring and adjusting automated cutting process equipment to achieve required outcomes, including hanging carcasses/pieces to meet production pace, monitoring control points and conducting inspections to confirm cut accuracy within specification
- monitoring supply and flow of carcasses/pieces to and from the automated cutting process
- taking corrective action in response to out-of-specification results, including adjusting blades/knives within level of responsibility
- responding to and/or reporting equipment failure within level of responsibility
- following procedures to adjust equipment for bird/portion type/size
- locating emergency stop functions on equipment

- following isolation and lock-out/tag-out procedures to take automated cutting process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records
- maintaining work area to meet housekeeping standards
- using process control systems according to workplace procedures
- cleaning and sanitising equipment according to workplace procedures
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the automated cutting process
- basic operating principles of equipment required to operate an automated cutting process, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- the flow of the automated cutting process and the effect of outputs on downstream processes
- quality characteristics to be achieved by the automated cutting process, including quality specifications and ability to assess cut quality and determine any required adjustments
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods used to monitor the automated cutting process, including inspecting the quality of cuts
- inspection or test points (control points) in the automated cutting process and the related procedures and recording requirements, including recording information (e.g. temperatures and product codes)
- contamination/food safety risks associated with the automated cutting process and related control measures
- common causes of variation and corrective action required when operating an automated cutting process
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the automated cutting process and workplace production requirements, including emergency and routine shutdowns, and procedures to follow in the event of a power outage
- isolation, lock-out and tag-out procedures and responsibilities for an automated cutting process

- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the automated cutting process, including waste/rework collection and handling procedures related to the process
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment
- cleaning and sanitation procedures required for the automated cutting process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - automated cutting process and related equipment and services
 - carcasses/pieces to be processed
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule/batch instructions
 - specifications, control points and processing parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR2061 Operate a wort production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a wort production process.

This unit applies to individuals who work under general supervision and exercise limited autonomy in a food processing environment. It typically applies to the production worker responsible for applying basic operating principles to the operation and monitoring of a wort production process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPOPR2011 Identify key stages and beer production equipment in a brewery

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work in processing area	1.1 Check production requirements against job specifications 1.2 Confirm availability of required materials according to production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Confirm availability of services according to production requirements 1.4 Wear appropriate personal protective clothing and ensure correct fit
2. Prepare the wort production process for operation	2.1 Conduct pre-start checks of equipment according to operating procedures 2.2 Identify work health and safety hazards and controls according to operating procedures 2.3 Set the wort production process to meet production requirements
3. Operate and monitor the wort production system	3.1 Start up the wort production system according to operating procedures 3.2 Monitor control points to confirm performance is maintained within specification 3.3 Undertake required tests according to operating procedures 3.4 Ensure system and sub-system outputs meet specification 3.5 Monitor equipment to confirm operating condition 3.6 Identify, rectify and/or report out-of-specification wort, process and equipment performance 3.7 Record production and other workplace information in the appropriate format
4. Shut down the wort production system	4.1 Identify the appropriate shut procedure and implement 4.2 Clean and maintain equipment according to workplace procedures 4.3 Collect, treat and dispose of or recycle waste generated by both the process and cleaning procedures according to environmental procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Interpret production requirements
Writing	Record operating, routine maintenance and shutdown information on paper-based and electronic media
Numeracy	- Monitor and interpret production and process control indicators and data - Monitor supply and flow of materials to and from the process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Communicate and report operational and safety information to relevant personnel - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Access and interpret process control panels and system - Maintain a clean and hazard-free work area - Identify out-of-specification standards and maintain quality specifications - Confirm equipment status and condition - Interpret process and equipment information to monitor process and respond to abnormal performance and variations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR2061 Operate a wort production process	FDFOP2066A Operate a wort production process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR2061 Operate a wort production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated a wort production process on at least one occasion, including:

- accessing workplace information to identify process requirements
- confirming availability of materials and services
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock-outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- setting up and starting the milling process
- setting up and starting the mashing and lautering process
- setting up and starting the wort separation process
- setting up and starting the wort boiling and cooling process
- adding raw materials, including hops and malt
- operating a heat exchange procedure
- operating a cool wort aeration procedure
- transferring fluids and materials between vessels
- handling dangerous goods
- operating and monitoring equipment associated with wort production
- monitoring control points
- identifying work health and safety hazards and controls

- selecting, fitting and using personal protective clothing and equipment
- undertaking shutdowns and changeovers
- complying with procedures and responsibilities for reporting problems
- complying with environmental procedures and controls
- following waste-handling requirements and procedures
- recording required production data
- cleaning and sanitising equipment according to workplace procedures
- maintaining work area to meet housekeeping standards
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and principles of the wort production process
- relationship between the wort production process and the fermentation process
- stages and changes that occur during wort production
- requirements of wort production
- purpose of malt, hops, water, adjuncts and the preparation procedure
- correct procedures for handling dangerous goods, including dust explosion hazards and control procedures relevant to the wort production process
- quality characteristics to be achieved for the wort production process
- wort process specifications, procedures and operating parameters
- the importance of temperature, temperature control systems and temperature intervals during wort production
- purpose of wort production equipment and instrumentation components
- significance and methods of monitoring control points within the wort production process
- common causes of variation and corrective action required
- work health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures
- cleaning requirements associated with changeovers and types of shutdowns
- procedures for reporting problems relevant to the wort production process
- cleaning and sanitation procedures for the wort production process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment

- wort production equipment
- wort production raw materials/ingredients
- services as required
- stock required for the wort production process
- stock flow system
- related work areas and communication system
- routine preventative maintenance schedule
- cleaning schedule
- sampling and testing schedules
- specifications:
 - work procedures, including advice on safe work practices, food safety and environmental requirements
 - production schedule, batch instructions
 - material safety data sheets
 - information on specifications, control points and production parameters
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR3001 Control contaminants and allergens in the workplace

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to control contaminants and allergens in the workplace.

This unit applies to individuals who work under broad direction and take responsibility for their own work in a food or beverage processing environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FDFFS2001A Implement the food safety program and procedures

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Assess risk of physical contamination	1.1 Identify types and sources of physical contamination in the workplace

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify risks of physical contamination to operations, product and consumer 1.3 Identify control measures to eliminate or reduce risks of physical contamination 1.4 Assess workplace procedures and practices to determine level of risk for physical contaminants and identify opportunities for improvement
2. Assess risk of chemical contamination	2.1 Identify types and sources of chemical contamination in the workplace 2.2 Identify risks of chemical contamination to operations, product and consumer 2.3 Identify control measures to eliminate or reduce risks of chemical contamination 2.4 Assess workplace procedures and practices to determine level of risk for chemical contaminants and identify opportunities for improvement
3. Assess risk of microbiological contamination	3.1 Identify types and sources of microbiological contamination in the workplace 3.2 Identify risks of microbiological contamination to operations, product and consumer 3.3 Identify control measures to eliminate or reduce risks of microbiological contamination 3.4 Assess workplace procedures and practices to determine level of risk for microbiological contaminants and identify opportunities for improvement
4. Assess risk of allergens in the workplace	4.1 Identify types and sources of allergens in the workplace 4.2 Identify risks of allergens to operations, product and consumer 4.3 Identify control measures to eliminate or reduce risks of allergens 4.4 Assess workplace procedures and practices to determine level of risk for allergens and identify opportunities for improvement
5. Implement control measures to manage contaminants and allergens	5.1 Implement control measures to minimise contaminants and allergens as part of work operations 5.2 Identify emergency procedures and conditions for implementation 5.3 Identify and complete reporting and documentation associated

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	with controls, as required 5.4 Conduct control measures in accordance with workplace environmental guidelines

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interpret workplace and standard operating procedures relevant to job role - Read and interpret food safety program requirements - Interpret workplace food safety practices, procedures and control measures
Writing	- Record results of inspection, sampling and testing - Report contamination and allergen risk
Numeracy	Monitor and interpret control indicators and data
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information
Interact with others	- Select and use communication strategies appropriate for purpose when interacting with work colleagues and customers - Use active listening, observational and questioning techniques to confirm information about food safety program - Identify and describe responsibilities, skills, knowledge and experience within context of job role - Seek and provide feedback on current work performance
Get the work done	- Maintain a clean and hazard-free work area - Manage and prioritise tasks and timelines - Make decisions and solve problems related to control of contaminants and allergens

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR3001 Control contaminants and allergens in the workplace	FDFOP3001A Control contaminants and allergens in the workplace	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR3001 Control contaminants and allergens in the workplace

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has controlled contaminants and allergens in the workplace on at least one occasion, including:

- identifying the types of physical, chemical and microbiological contaminants and allergens that present a risk in the workplace
- identifying sources of risks
- examining control measures
- describing the appropriate monitoring requirements for each risk, including:
 - method or procedure to be followed
 - frequency and timing
 - person responsible
 - information to be recorded (procedures to be followed would be typically specified in the form of a standard operating procedure or work instruction)
- describing corrective action requirements in the event that acceptable limits or requirements of controls are not met
- developing or reviewing documentation relating to the food safety program, including process flow diagrams, hazard analysis charts and tables, support program requirements, data analysis reports, corrective action reports and verification reports
- using oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- communicating food safety responsibilities within level of responsibility
- implementing control measures as part of work operations
- identifying emergency procedures and conditions for implementation
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the purpose and intent of food safety legislation and control measures for contaminants and allergens
- roles and responsibilities for development and maintenance of the control measures
- food processing methods used in the workplace or work area and the risks of contamination
- sources of technical expertise on contaminants and allergens
- the role of control measures in the food safety program
- documentation and recording requirements to support communication and monitoring of the food safety program, including procedures for maintaining and updating relevant documents, including operating procedures
- main types of food safety contamination likely to occur given the type of product and processing methods used
- acceptable control methods for the hazards identified, and required corrective action when control requirements are not met
- validation and verification processes, techniques, and responsibilities to control contaminants and allergens in the workplace.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements
 - information on monitoring requirements, control methods and corrective action for risks
 - documentation and recording requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR3002 Prepare food products using basic cooking methods

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare food products using basic cooking methods.

This unit applies to individuals who work under broad direction and take responsibility for their own work in a food processing environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FDFFS2001A Implement the food safety program and procedures

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Select and handle cooking tools and equipment	1.1 Prepare work area for operations and confirm hygiene standards 1.2 Wear appropriate personal protective clothing and ensure correct fit

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify, handle and store cooking utensils required for work according to workplace procedures 1.4 Identify and prepare equipment and machinery required for cooking operation according to workplace procedures 1.5 Identify and implement maintenance requirements for knives and other utensils 1.6 Implement food safety requirements at all times when handling and using cooking utensils and equipment
2. Prepare ingredients	2.1 Examine recipe and identify required ingredients 2.2 Determine sequence for preparation 2.3 Select ingredients and confirm quantity and quality using measuring or weighing devices or sensory analysis techniques 2.4 Prepare and assemble ingredients according to recipe requirements 2.5 Store ingredients according to workplace procedures
3. Use basic cooking methods	3.1 Identify the range of basic cooking methods and their effect on quality, taste and nutritional value 3.2 Identify cooking methods required by recipe and determine sequence 3.3 Apply cooking method to achieve quality standards for food item 3.4 Identify and address typical problems as they arise 3.5 Use cooking utensils and equipment according to manufacturer instructions 3.6 Apply waste minimisation and environmental considerations during cooking process 3.7 Clean cooking area, utensils and equipment, and store according to workplace standards
4. Finish product	4.1 Transfer cooked ingredients for further processing 4.2 Assemble final product and present or pack according to recipe or operating requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	- Estimate and calculate ingredient amounts - Determine preparation and cooking times from packaging and recipes - Measure quantities of ingredients
Reading	- Read cooking instructions from recipe books - Read and interpret hygiene and food safety requirements from food safety program information
Navigate the world of work	- Apply workplace procedures relevant to own responsibilities - Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, housekeeping standards and procedures, quality requirements and operating procedures
Interact with others	- Communicate and report operational and safety information to relevant persons - Select and use appropriate terminology when communicating with others - Cooperate with others to rectify work health and safety hazards and operational maintenance requirements - Participate in conversations relevant to role by responding, explaining, negotiating and persuading
Get the work done	- Safely use/operate cooking tools and equipment - Make routine decisions to correct familiar and routine problems - Identify and follow quality and hygiene requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR3002 Prepare food products using basic cooking methods	FDFOP3005A Prepare food products using basic cooking methods	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR3002 Prepare food products using basic cooking methods

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has prepared two different food products using basic cooking methods on one or two occasions, including:

- identifying and accessing ingredients
- reading and interpreting recipe requirements
- safely and correctly using work utensils and equipment
- interpreting numerical information on quantities and conducting measurements
- applying safe work and food safety standards
- selecting, fitting and using personal protective clothing and equipment
- planning operations
- applying cooking method to achieve quality standards for food item
- identifying cooking problems and taking corrective action, including reporting abnormalities or problems, repeating processes and/or making required adjustments
- maintaining work area to meet housekeeping standards
- following relevant work health and safety procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- uses and characteristics of basic food ingredients
- major food groups and classifications
- range of ingredients typically used in the workplace and their characteristics and effect on food quality and taste
- principles of basic cookery
- food safety standards in the workplace
- common terminology used in cooking

- maintenance requirements for knives and other utensils
- basic cooking methods and their effect on quality, taste and nutritional value
- waste minimisation and environmental considerations related to preparing food products using basic cooking methods.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective clothing and equipment
 - ingredients, utensils and equipment to be used for preparation of food products
 - recipes
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality and environmental requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPOPR3003 Identify cultural, religious and dietary considerations for food production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Application

This unit of competency describes the skills and knowledge required to identify cultural, religious and dietary considerations for food production.

This unit applies to individuals who work under broad direction and take responsibility for their own work in a food or beverage processing environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Operational (OPR)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify requirements of customers with cultural and religious	1.1 Identify cultural and religious practices and events that influence food production requirements 1.2 Identify food production methods and food products that cater for

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
backgrounds	cultural and religious practices and events 1.3 Assess the suitability of current food production methods and current food products against cultural and religious requirements 1.4 Identify alternative processes and products for customers with cultural and religious requirements related to food production
2. Identify dietary requirements of customers	2.1 Identify a range of specific dietary requirements and their impact on food production 2.2 Identify food products that cater for specific dietary requirements 2.3 Assess the suitability of current food production methods and current food products against dietary requirements 2.4 Identify alternative processes and products for customers with dietary requirements related to food production
3. Identify requirements of customers with food-related allergies	3.1 Identify common food-related allergies 3.2 Conduct risk assessment of current products and processes against common food-related allergies 3.3 Identify food production procedures to avoid contamination with allergens

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret workplace and standard operating procedures relevant to job role
Writing	Record routine information on paper-based and electronic media
Numeracy	Calculate and estimate food quantities and pricing
Navigate the world of work	- Apply workplace procedures to own role and responsibilities - Identify skills, knowledge and experience required for performing own role in the workplace - Ask questions to clarify understanding or seek further information

Skill	Description
	Participate in development of knowledge of cultural and religious practices and events that influence food production requirements
Interact with others	- Communicate and report operational and safety information to relevant personnel - Ask questions and listen carefully to gather, interpret or evaluate information, to clarify understanding or to seek further information - Use modes of communication suitable to purpose to confirm understanding when conducting operational start-up and shutdown procedures
Get the work done	- Make decisions relating to appropriate communication and relationship-building strategies - Solve familiar and generally predictable cross-cultural problems and conflicts within workplace guidelines and using experience of past solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPOPR3003 Identify cultural, religious and dietary considerations for food production	FDFOP3006A Identify cultural, religious and dietary considerations for food production	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPOPR3003 Identify cultural, religious and dietary considerations for food production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has identified cultural, religious and dietary considerations for food production on at least two separate occasions, including:

- using communication skills to interpret customer requests, and suggesting appropriate products that meet customer requirements
- accessing information on cultural, religious and dietary needs
- applying product knowledge to determine appropriate food products and processes to comply with cultural, religious or dietary considerations
- identifying common food-related allergens
- identifying procedures to avoid food contamination.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- ingredients of available food products which can impact on specific cultural, religious and dietary requirements of customers
- food production processes of products which can impact on specific cultural, religious and dietary requirements of customer including:
 - food safety principles and regulations
 - food safety hazards and risks
 - food safety program requirements
 - client conditions and associated needs and requirements
- specific dietary requirements, including:
 - coeliac
 - diabetes
 - food allergies

- food intolerances
- swallowing problems requiring food texture modification
- malnutrition
- different cultural requirements that impact on food production processes, including:
 - halal
 - Hindu
 - kosher
 - vegetarian
 - vegan
- additional dietary guidelines for specific populations, including older people and unwell people
- key health and legal consequences of failing to address special food requirements including:
 - drug–food interactions
 - allergic reactions
 - anaphylaxis
 - food sensitivity or intolerance reactions
 - choking.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - production equipment appropriate to product type
 - materials/ingredients to meet recipe requirements
 - ingredient pricing information
 - personal protective clothing, equipment and material safety data sheets (MSDS)
 - cleaning procedures, materials and equipment
- specifications:
 - work procedures, including advice on relevant product requirements, safe work practices, food safety, quality and environmental requirements
 - recipes and customer specifications.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2001 Operate a cooling and slicing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to cool and slice cake baked on a band or belt. It does not apply to manual cutting of cake baked in a tin or pan.

The unit applies to individuals who work in a cake production environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of a cooling and slicing process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the cooling and cutting equipment	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
and process for operation	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of baked cake to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating and safety requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor the cooling and cutting process	2.1 Start and operate the cooling and cutting process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that cake temperature and cut pieces meet specifications 2.4 Identify, report and rectify out-of-specification product and process outcomes 2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental and food safety procedures
3. Shut down the process	3.1 Complete the process safely according to workplace procedures 3.2 Identify and report maintenance requirements according to workplace procedures 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and recognise workplace signage
Numeracy	- Interpret symbols and numbers on temperature gauges and to calibrate equipment - Use basic arithmetic to calculate quantities - Measure size and weight of cake pieces against specifications
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources and sequence tasks required to operate cooling and slicing process - Monitor processes and control points, identify routine problems related to own work or role and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2001 Operate a cooling and slicing process	FDFBK2001A Operate a cooling and slicing process	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2001 Operate a cooling and slicing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a cooling and slicing process for cake products on at least three separate occasions, including:

- accessing workplace information to identify cooling and cutting requirements
- selecting, fitting and using personal protective clothing and equipment
- confirming supply of cake and necessary materials and services
- conducting pre-start checks on machinery used for cooling and slicing cake including:
 - inspecting knife condition to identify any signs of wear
 - selecting appropriate settings to meet cake dimension requirements
 - cancelling isolation or lock outs
 - confirming equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been completed
 - confirming all safety guards are in place and operational
- confirming cooling and cutting equipment settings, including:
 - conveyor speed
 - cooling tunnel settings
 - guides
 - knife position
- starting, operating, monitoring and adjusting process equipment to achieve cake production specifications including:
 - cake temperature - temperature gauges
 - throughput
 - cut cake appearance, dimensions and weight
 - knife position and condition

- monitoring process control points and supply and flow of materials to and from the process
- taking corrective action in response to typical faults and inconsistencies in line with own role and responsibilities
- following work health and safety procedures, including:
 - responding to and reporting equipment failure
 - locating emergency stop functions on equipment
 - following isolation and lock out and tag out procedures to take process and related equipment off-line in preparation for cleaning and maintenance
- shutting down equipment safely according to workplace procedures
- completing workplace records
- applying environmental and food safety policies and procedures to work practices including:
 - maintaining work area to meet housekeeping standards
 - cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of cake cooling and slicing process
- basic operating principles of cooling and slicing equipment and main components including:
 - status and purpose of guards
 - operating capacities and applications of equipment used in performance evidence
 - purpose and location of sensors and related feedback instrumentation
 - procedures to replace rotary knives
- types and safe operating procedures for cooling and slicing equipment, including:
 - conveyors
 - cooling tunnels
 - guides
 - rotary knives
 - guillotine knives
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- basic operating principles of process control and relationship between control panels and systems, and cooling and slicing equipment
- key features of flow of cooling and slicing process and effect of outputs on downstream processes
- outcomes to be achieved by cooling and slicing process, including:
 - required temperature range for cake types

- scope to adjust product length to achieve a given weight
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters, including:
 - effect of ambient temperature on the cooling process
 - possible cause of condensation formation on product from the cooling tunnel
- methods used to monitor the cooling and slicing process, including:
 - inspecting, measuring and testing
 - inspection or test points (control points)
 - related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls, including:
 - risks associated with working with refrigerant and action required in the event of a leak
 - isolation, lock out and tag out procedures and responsibilities
- procedures for confirming services, including:
 - air
 - water
 - steam
- environmental and food safety issues and controls relevant to cooling and slicing process, including:
 - contamination and food safety risks
 - waste and rework collection and handling procedures
 - cleaning and sanitation procedures
- equipment shutdown requirements relevant to performance evidence, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - personal protective clothing and equipment
 - cooling and slicing equipment, including conveyors, cooling tunnels, rotary knives, guillotine knives and guides
 - cake for cooling and slicing
 - documentation or technology for recording information
 - cleaning procedures, materials and equipment

- specifications:
 - work instructions including control points and cooling and slicing processing parameters
 - production schedule for cooling and slicing process
 - information on equipment capacity and operating parameters
 - workplace procedures for cooling and slicing process
- relationships (internal and/or external):
 - workplace supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2002 Operate a pastry forming and filling process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a process to deposit fillings into a pastry shell or onto a pastry sheet which is then topped or formed to product specifications.

This unit applies to individuals who work in a production baking environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of a pastry forming and filling process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the pastry forming and filling	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
equipment and process for operation	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of materials able to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating and safety requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor the pastry forming and filling process	2.1 Start the pastry forming and filling process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that product meets specifications 2.4 Identify, report and rectify out-of-specification product and process outcomes 2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental and food safety procedures
3. Shut down the process	3.1 Complete the process safely according to workplace procedures 3.2 Identify and report maintenance requirements according to workplace procedures 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and recognise workplace signage
Numeracy	- Interpret symbols and numbers to calibrate equipment and set process parameters - Use basic arithmetic to calculate quantities - Measure size and weight of pastry and fillings against specifications
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources and sequence tasks to operate a pastry forming and filling process - Monitor processes and control points, identify routine problems related to own work or role and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2002 Operate a pastry forming and filling process	FDFBK2002A Operate a pastry forming and filling process	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2002 Operate a pastry forming and filling process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a pastry forming and filling process on at least three occasions, including:

- accessing workplace information to identify pastry forming and filling processing requirements
- selecting, fitting and using personal protective clothing and equipment
- confirming supply and condition of necessary materials and services including:
 - transfer of fillings and pastry to the production line to meet production requirements
 - pastry types and fillings match product specifications
 - availability of tin spray, water and egg yolk spray
 - suitability of rework pastry
- conducting pre-start checks on machinery used for pastry forming and filling including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock outs
 - confirming equipment is clean and correctly configured for pastry forming and filling processing
 - positioning sensors and controls correctly
 - confirming scheduled maintenance has been carried out
 - ensuring all safety guards are in place and operational
 - checking trays are available and positioned
- starting, operating, monitoring and adjusting pastry forming and filling process equipment to achieve production specifications including:
 - pastry thickness
 - alignment of deposited filling in relation to pastry sheet or shell
 - amount and/or rate of filling deposited

- product weight
- enclosure of pastry product by forming, rolling or covering with a pastry top
- application of toppings and finishes according to production schedule
- appearance (size and shape)
- monitoring supply and flow of materials to and from the pastry forming and filling process and equipment operation to confirm process remains within specification
- taking corrective action in response to typical faults and out-of-specification results in line with own role and responsibilities
- following work health and safety procedures including:
 - responding to and reporting equipment failure
 - locating emergency stop functions on equipment
 - following isolation and lock out and tag out procedures to take pastry forming and filling process and related equipment off-line in preparation for cleaning and maintenance
- shutting down equipment safely according to workplace procedures
- completing workplace records
- applying environmental and food safety policies and procedures to work practices including:
 - maintaining work area to meet housekeeping standards
 - cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the pastry forming and filling process
- types of equipment, including:
 - filling equipment
 - depositing equipment forming equipment
 - weighing equipment
 - trays and tin
 - rework bins
 - hoppers
 - spike rollers and cutter
 - shakers and topping equipment
- types of fillings:
 - sweet
 - savoury
 - hot
 - cold

- procedures for monitoring supply and flow of materials to and from the pastry forming and filling process and equipment operation to confirm process remains within specification
- basic operating principles of pastry forming and filling equipment, including:
 - main equipment components and attachments
 - status and purpose of guards
 - operating capacities and applications of equipment used in performance evidence
 - purpose and location of sensors and related feedback instrumentation
 - procedures for selecting and fitting appropriate filler heads and/or finishing attachments
- typical equipment faults and related causes, including:
 - recognition of signs and symptoms of faulty equipment
 - early warning signs of potential problems
- basic operating principles of process control, including the relationship between control panels and systems and pastry forming and filling equipment
- key features of flow of the pastry forming and filling process and the effect of outputs on customer satisfaction and downstream processes, including freezing or baking
- pastry forming and filling process specifications, procedures and operating parameters, including:
 - procedures for preparing fillings, operating the depositing process, and operating closing (lidding) and finishing
 - quality requirements of materials and ingredients and effect of variation on pastry forming and filling process performance
 - quality standards required of the filled product
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- methods used to monitor the pastry forming and filling production process, including:
 - inspecting, measuring and testing as required by the process
 - inspection or test points (control points) in the process
 - related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls, including:
 - awareness of the limitations of personal protective equipment relevant to the pastry forming and filling process
 - isolation, lock out and tag out procedures and responsibilities
- equipment and process shut down requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- procedures and responsibility, including:
 - pastry forming and filling process changeover
 - reporting production and performance information

- environmental and food safety issues and controls relevant to pastry forming and filling process, including:
 - contamination risks and corrective action required
 - waste and rework collection and handling procedures
 - cleaning and sanitation procedures.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - personal protective clothing and equipment
 - pastry forming and filling equipment
 - filling ingredients and pastry to be filled and formed
 - documentation or technology for recording information
 - cleaning procedures, materials and equipment
- specifications:
 - work instructions, including control points and pastry forming and filling production processing parameters
 - production schedule and recipe and batch specifications for pastry products
 - information on equipment capacity and operating parameters
 - workplace procedures for pastry forming and filling production process
- relationships (internal and/or external):
 - workplace supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2003 Manufacture rye crisp breads

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a rye crisp breads manufacturing process.

This unit applies to individuals who work in a baking production environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of machines and equipment used in a crisp bread manufacturing process.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the rye crisp bread manufacturing equipment and process	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
for operation	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of materials to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating and safety requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor rye crisp bread manufacturing process	2.1 Start the rye crisp bread manufacturing process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that product meets specifications 2.4 Identify, report and rectify out-of-specification product and process outcomes 2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental and food safety procedures
3. Shut down the process	3.1 Complete the process safely according to workplace procedures 3.2 Identify and report maintenance requirements according to workplace procedures 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and recognise workplace signage
Numeracy	- Interpret symbols and numbers to calibrate equipment - Use basic arithmetic to calculate quantities of dough and slurry - Measure size and weight of rye crisp breads against specifications
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources, and sequence tasks to manufacture rye crisp breads - Monitor processes and control points, identify routine problems related to own work or role and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2003 Manufacture rye crisp breads	FDFBK2003A Manufacture rye crisp breads	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2003 Manufacture rye crisp breads

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a rye crisp breads manufacturing process on at least three separate occasions, including:

- accessing workplace information to identify rye crisp breads manufacturing requirements
- selecting, fitting and using personal protective equipment
- confirming supply of necessary materials and services, including confirming slurry quality, quantity, temperature and degree of aeration
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- confirming settings, including:
 - ovens and cutter settings for product type
 - web speed settings
 - depositing rate settings
 - flour (dusting) process settings
 - docking roller adjusted for product type
- starting, operating, monitoring and adjusting rye crisp breads manufacturing equipment to achieve production specification, including:
 - slurry volume, weight and density
 - biscuit size (width, length and thickness)

- biscuit texture, colour and weight
- biscuit moisture level
- clean, even break or cut
- using process control systems, monitoring control points and conducting inspections as required to confirm process remains within specification and ensuring that system has reached specified temperature
- monitoring supply and flow of materials to and from the rye crisp breads manufacturing process
- taking corrective action in response to out-of-specification results in line with own role and responsibilities
- following work health and safety procedures, including:
 - responding to and/or reporting equipment failure
 - locating emergency stop functions on equipment
 - following isolation and lock out and tag out procedures
- shutting down or taking equipment off line safely according to workplace procedures
- completing workplace records
- applying environmental and food safety policies and procedures to work practices including:
 - maintaining work area to meet housekeeping standards
 - cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each stage of the rye crisp breads manufacturing process
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems
- the flow of the rye crisp breads manufacturing process and the effect of outputs on downstream processes
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the rye crisp bread manufacturing equipment
- specifications and quality characteristics to be achieved by the rye crisp breads manufacturing process, including:
 - quality requirements of materials and effect of variation on process performance
 - effect of slurry temperature on its ability to hold air
 - effect of docking roller on baking process

- changes which occur in product during processing
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- methods used to monitor the rye crisp breads manufacturing process, including:
 - inspecting, measuring and testing as required by the crisp bread manufacturing process
 - inspection or test points (control points) in the process
 - related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls, including:
 - work isolation, lock out and tag out procedures and responsibilities
 - requirements of different shut downs
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information
- environmental and food safety issues and controls relevant to the rye crisp breads manufacturing process, including:
 - waste and rework collection and handling procedures
 - contamination and food safety risks
 - cleaning and sanitation procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - cleaning procedures, materials and equipment
 - personal protective clothing and equipment
 - depositing, baking, cutting, stacking and related equipment for rye crisp bread manufacturing
 - documentation or technology for recording information
- specifications:
 - work instructions including control points and rye crisp breads processing parameters
 - production schedule and recipe and batch specifications for rye crisp breads
 - dough, mix and slurry to meet production requirements
 - information on equipment capacity and operating parameters
 - workplace procedures for operating rye crisp bread manufacturing process
 - relationships (internal and/or external):
 - workplace supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2004 Manufacture wafer products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a wafer products manufacturing process.

This unit applies to individuals who work in a baking production environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of machines and equipment used in the wafer manufacturing process.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the wafer process for operation	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of materials to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check equipment and adjust according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor the wafer process	2.1 Start the wafer products manufacturing process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that product meets specifications 2.4 Identify, rectify and report out-of-specification product and process outcomes 2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental guidelines
3. Shut down the process	3.1 Identify the appropriate shutdown procedure and implement 3.2 Identify and report maintenance requirements 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and production schedule and recognise workplace signage
Numeracy	- Interpret symbols and numbers to calibrate equipment and set oven temperatures and processing parameters - Use basic arithmetic to calculate quantities of wafer batter - Measure wafer width, length and thickness against specifications
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources and sequence tasks to manufacture wafer products - Monitor processes and control points, identify routine problems related to own work or role, and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2004 Manufacture wafer products	FDFBK2004A Manufacture wafer products	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2004 Manufacture wafer products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a wafer manufacturing process on at least three separate occasions, including:

- accessing workplace information to identify wafer production requirements
- selecting, fitting and using personal protective equipment
- confirming supply of necessary materials and services, including confirming quality, quantity and temperature of batter
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock outs
 - confirming that related equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- ensuring correct batter is supplied and confirm settings, including:
 - wafer plates are selected for product type
 - oven settings for product type
 - web/chain speed settings
 - depositing rate settings
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring control points and conducting inspections as required to confirm process remains within specification, including:
 - wafer size (width, length and thickness)
 - wafer texture, colour and weight

- wafer moisture level
- using process control systems according to workplace procedures
- monitoring supply and flow of materials to and from the process
- taking corrective action in response to out-of-specification results in line with own role and responsibilities
- following work health and safety procedures, including:
 - responding to and/or reporting equipment failure
 - locating emergency stop functions on equipment
 - shutting down equipment in response to an emergency situation
 - following isolation and lock out/tag out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- completing workplace records as required
- applying environmental and food safety policies and procedures to work practices, including:
 - maintaining work area to meet housekeeping standards
 - cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of each stage of the wafer manufacturing process
- basic operating principles of equipment, including:
- main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems
- the flow of the wafer manufacturing process and the effect of outputs on downstream processes
- basic operating principles of process control, including the relationship between control panels and systems and wafer products manufacturing equipment
- specifications and quality characteristics to be achieved by the wafer manufacturing process, including:
 - quality requirements of materials
 - effect of variation on wafer manufacturing process performance
 - changes which occur in product during processing
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- methods used to monitor the wafer manufacturing process, including:

- inspecting, measuring and testing as required by the wafer products manufacturing process
- inspection or test points (control points) in the process
- related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls, including:
 - routine shut down for wafer manufacturing process
 - emergency shut downs
 - procedures to follow in the event of a power outage
 - isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental and food safety issues and controls relevant to the wafer manufacturing process, including:
 - waste and rework collection and handling procedures
 - contamination and food safety risks
 - cleaning and sanitation procedures.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - cleaning procedures, materials and equipment
 - personal protective clothing and equipment
 - depositing, baking, and related equipment used in wafer production
 - wafer plates
 - batter to meet production requirements
 - documentation or technology for recording information
- specifications:
 - work instructions including control points and wafer manufacturing processing parameters
 - production schedule and recipe and batch specifications for wafer products
 - workplace procedures for operating wafer products manufacturing process
 - information on equipment capacity and operating parameters
- relationships (internal and/or external):
 - workplace supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2005 Operate a doughnut making process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down the doughnut manufacturing process.

This unit applies to individuals who work in a baking production environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of doughnut production.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the manufacturing equipment and process	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
for operation	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of materials to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor the doughnut manufacturing process	2.1 Start the doughnut-making process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that product meets specifications 2.4 Identify, rectify and report out-of-specification product and process outcomes 2.5 Use equipment to apply topping and fillings according to production specifications and operator instructions 2.6 Conduct work and maintain a clean and tidy workplace according to workplace environmental guidelines
3. Shut down the process	3.1 Complete the process safely according to workplace procedures 3.2 Identify and report maintenance requirements 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and production schedule and recognise workplace signage
Numeracy	- Interpret symbols and numbers to calibrate equipment and check frying temperatures - Use basic arithmetic to calculate quantities of doughnut mix, oil, glazing and other products needed for production
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources and sequence tasks required to produce doughnuts - Monitor processes and control points, identify routine problems related to own work or role, and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2005 Operate a doughnut making process	FDFBK2005A Operate a doughnut making process	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2005 Operate a doughnut making process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a doughnut-making process on at least three occasions, including:

- accessing workplace information to identify doughnut manufacturing requirements
- selecting, fitting and using personal protective equipment
- confirming supply of necessary materials and services
- confirming condition of materials, including confirming flour and water temperature, flour type and oil type
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock outs
 - confirming that equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming that all safety guards are in place and operational
- conducting pre-start checks for equipment, including:
 - doughnut mixing and forming equipment
 - deep frying equipment
 - cooling tunnels/spirals
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes, including monitoring:
 - materials transfer prior to commencing mixing
 - mixing parameters for water and flour temperature
 - sequence of ingredient addition and mixing times

- forming parameters, including air pressure to maintain weight of doughnut
- proving parameters - humidity and temperature within prover and time
- frying parameters - oil temperature, appearance of cooked doughnuts and time
- operating finishing/filling equipment according to workplace procedures, including:
 - preparing decorating ingredients
 - mixing and heating, crushing, cutting or sieving toppings
- monitoring temperature of toppings, spread/application of toppings and glazes, jam/filling placement and quantity and appearance of finished product
- using process control systems according to workplace procedures
- taking corrective action in response to out-of-specification results in line with own role and responsibilities
- following work health and safety procedures including:
 - responding to and/or reporting equipment failure
 - locating emergency stop functions on equipment
 - following isolation and lock out or tag out procedures to take process and related equipment off-line in preparation for cleaning and/or maintenance
- completing workplace records
- applying environmental and food safety policies and procedures to work practices, including:
 - maintaining work area to meet housekeeping standards
 - cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the doughnut manufacturing process
- stages and requirements of each processing stage in doughnut manufacture, including:
 - mixing
 - proving
 - frying
 - filling
 - finishing
- role of main ingredients, including:
 - flour
 - yeast
 - water
 - ice
 - oil
 - glazes
 - topping

- pre-mixes
- types of equipment, including:
 - doughnut mixing and forming equipment
 - filling equipment
 - finishing equipment
 - deep frying equipment, gas and electric
 - cooling tunnels and spirals
 - weigh scales
 - hoppers
 - forming equipment
 - cutters
 - injectors
 - provers
 - enrobers
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- starting, operating, monitoring and adjusting process equipment to achieve required outcomes
- typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems
- basic operating principles of process control, including the relationship between control panels and systems and the doughnut production equipment
- key features of the flow of the doughnut manufacturing process and the effect of outputs on customer satisfaction and downstream processes, including packaging
- quality requirements of materials and effect of variation on doughnut manufacturing process performance
- quality characteristics to be achieved by the finished doughnut
- process specifications, procedures and operating parameters, including procedures for adjusting water temperature to compensate for atmospheric conditions
- operating requirements and parameters and corrective action required where results are out-of-specification operating parameters
- methods used to monitor the doughnut manufacturing process, including:
 - inspecting, measuring and testing
 - inspection or test points (control points) in the process
 - related procedures and recording requirements
 - temperature of toppings
 - spread and application of toppings and glazes
 - placement of jams and fillings

- quantity and appearance of finished product
- common causes of variation and corrective action required
- doughnut-finishing requirements, including:
 - preparation methods
 - monitoring of parameters
 - application of finishings
 - quality requirements
- work health and safety hazards and controls, including:
 - limitations of personal protective equipment
 - routine shut down requirements
 - emergency shut down procedures
 - procedures to follow in the event of a power outage
 - isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental and food safety issues and controls relevant to the doughnut manufacturing process, including:
 - waste and rework collection and handling
 - contamination and food safety risks
- cleaning and sanitation procedures.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - personal protective clothing and equipment
 - doughnut mixing, forming, proving, injecting and frying equipment, and glazing and topping application equipment
 - doughnut ingredients, frying oil and glazing, or toppings and fillings to meet production requirement
 - documentation or technology for recording information
 - cleaning procedures, materials and equipment
- specifications:
 - work instructions including control points and doughnut production processing parameters
 - production schedule and recipe and batch specifications for doughnut products
 - information on equipment capacity and operating parameters
 - workplace procedures for doughnut production process
- relationships (internal and/or external):
 - workplace supervisor

- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2006 Operate a griddle production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a griddle production process.

This unit applies to individuals who work in a production baking environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of a griddle production process.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the griddle product manufacturing equipment and process	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
for operation	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of materials to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor the griddle product manufacturing process	2.1 Start the griddle product manufacturing process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that product meets specifications 2.4 Identify, rectify and report out-of-specification product and process outcomes 2.5 Conduct work and maintain a clean and tidy work area according to workplace environmental guidelines
3. Shut down the process	3.1 Complete the process safely according to workplace procedures 3.2 Identify and report maintenance requirements 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and production schedule and recognise workplace signage
Numeracy	- Interpret symbols and numbers to calibrate equipment and set process temperatures - Use basic arithmetic to calculate quantities and weigh ingredients needed for production
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources and sequence tasks required to operate a griddle production process - Monitor processes and control points, identify routine problems related to own work or role and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2006 Operate a griddle production process	FDFBK2006A Operate a griddle production process	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2006 Operate a griddle production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a griddle production process for different products on at least three occasions, including:

- confirming processing requirements and availability, condition and quantities of materials, services and ingredients
- safely conducting pre-start checks according to workplace requirements
- safely starting, operating, monitoring and adjusting process equipment to achieve required outcomes
- using process control systems according to workplace procedures
- taking corrective action in response to out-of-specification results in line with own role and responsibilities
- completing workplace records
- applying environmental and food safety policies and procedures to work practices.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of griddle product manufacturing
- type and purpose of griddle equipment, including:
 - weighing equipment
 - mixing equipment
 - depositing equipment
 - cooking equipment
 - cooling fans and tunnels
 - extraction fans
 - conveyors

- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- procedures, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation and lock outs
 - confirming equipment is clean and correctly configured for processing requirements
 - positioning sensors and controls correctly
 - ensuring any scheduled maintenance has been carried out
 - confirming all safety guards are in place and operational
- typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems
- procedures for monitoring production, including:
 - materials transfer prior to commencing mixing
 - mixing parameters including water temperature, sequence of ingredient addition, mixing times and mix consistency
 - depositing parameters to achieve product size and weight
 - monitoring mixture levels in hopper and alignment of deposited mixture
 - griddle line equipment, including temperature of cooking surface, the size, shape and colour of product, and moisture content of product
 - cooling equipment and time
- typical griddle ingredients, including:
 - flour
 - water
 - eggs
 - sugar
 - yeast
 - flavourings
 - colourings
 - spices
- basic operating principles of process control, including the relationship between control panels and systems and griddle production equipment
- key features of the flow of the griddle production process and the effect of outputs on customer satisfaction and downstream processes
- quality requirements of materials and effect of variation on process performance
- quality characteristics to be achieved by griddle products
- griddle product manufacturing process specifications, procedures and operating parameters

- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- methods used to monitor the production process, including:
 - inspecting, measuring and testing processes
 - inspection and test points (control points) in the process
 - related procedures and recording requirements
- common causes of variation and corrective action required
- work health and safety hazards and controls relevant to the griddle product manufacturing process, including:
 - limitations of personal protective equipment
 - routine shut down procedures
 - emergency shut down procedures
 - procedures to follow in the event of a power outage
 - isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental and food safety issues and controls relevant to the process, including:
 - waste and rework collection and handling procedures
 - contamination and food safety risks
 - cleaning and sanitation procedures.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - personal protective clothing and equipment
 - griddle line and related equipment
 - ingredients to produce griddle products
 - documentation or technology for recording information
 - cleaning materials and equipment
- specifications:
 - work instructions, including control points and griddle production processing parameters
 - production schedule and recipe and batch specifications for griddle products
 - information on equipment capacity and operating parameters
 - workplace procedures for griddle production process
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK2007 Operate a pastry production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a pastry production process, including mixing and sheeting or layering processes.

This unit applies to individuals who work in a production baking environment under general supervision with some accountability for their own work. This includes identifying and providing solutions to a limited range of predictable problems relating to the operation and monitoring of the pastry production process and associated equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the pastry production equipment	1.1 Read or listen to work instructions from supervisor and clarify where needed

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
and process for operation	1.2 Identify work health and safety hazards and report to supervisor 1.3 Wear appropriate personal protective equipment and ensure correct fit 1.4 Confirm availability of materials to meet production requirements 1.5 Identify and confirm cleaning and maintenance requirements have been met 1.6 Fit machine components and related attachments and adjust to meet operating requirements 1.7 Select processing and operating parameters to meet safety and production requirements 1.8 Check and adjust equipment according to manufacturer instructions to ensure optimum performance 1.9 Carry out pre-start checks according to operator instructions
2. Operate and monitor the pastry production process	2.1 Start the pastry production process according to workplace procedures 2.2 Monitor equipment to identify variation in operating conditions and report variations in equipment operation 2.3 Monitor the process to confirm that product meets specifications 2.4 Identify, rectify and report out-of-specification product and process outcomes 2.5 Conduct work and maintain a clean and tidy workplace according to workplace environmental guidelines
3. Shut down the process	3.1 Complete the pastry production process safely, according to workplace procedures 3.2 Identify and report maintenance requirements 3.3 Maintain workplace records accurately according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret text in work instructions and production schedule, and recognise workplace signage
Numeracy	- Interpret symbols and numbers to calibrate equipment and check cooking temperatures and humidity - Use basic arithmetic to calculate quantities and weigh ingredients needed for pastry production
Oral communication	Participate in verbal exchanges to ask questions and convey workplace information
Navigate the world of work	Recognise and follow workplace requirements, including safety, quality, food safety and environmental requirements, associated with own role and area of responsibility
Interact with others	Follow accepted practices and protocols for reporting issues to supervisors
Get the work done	- Follow clearly defined instructions to plan and assemble resources and sequence tasks required to produce pastry - Monitor processes and control points, identify routine problems related to own work or role and initiate standard procedures to resolve - Use key functions and follow routine procedures for using digital technology and automated equipment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK2007 Operate a pastry production process	FDFBK2007A Operate a pastry production process	Updated to meet Standards for Training Packages Minor changes to performance criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK2007 Operate a pastry production process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has set up, operated, adjusted and shut down a pastry production process on at least three occasions, including:

- accessing workplace information to identify pastry production processing requirements
- selecting, fitting and using personal protective equipment
- selecting ingredients and materials for pastry production:
 - according to recipe and production specifications
 - confirming supply, condition and quality of ingredients
- conducting pre-start checks, including:
 - inspecting equipment condition to identify any signs of wear
 - selecting appropriate settings and/or related parameters
 - cancelling isolation or lock outs
 - confirming equipment is clean and correctly configured for pastry production
 - positioning sensors and controls correctly
 - ensuring scheduled maintenance has been carried out
 - confirming all safety guards are in place and operational
 - positioning rework bins
- starting, operating, monitoring and adjusting pastry production process equipment to achieve production outcomes, including setting up and starting up mixers, rollers and laminating processes
- monitoring control points and conducting inspections to confirm process remains within specification
- monitoring supply and flow of materials to and from the dough preparation process and equipment operation to confirm process remains within specification, including:
 - flour temperature and type
 - water temperature

- fat type, distribution and percentage required for specific pastry types
- rework pastry addition
- dough characteristics
- mixing time
- rolling and laminating dough to specification, including:
 - ensuring in-line hoppers are filled with flour to prevent pastry sticking to rollers
 - roller settings are within specification
 - checking pastry thickness, fat percentage and number of pastry layers
- monitoring supply and flow of materials to and from the laminating process and equipment operation to confirm process remains within specification
- cutting and stacking or rolling pastry according to production requirements
- using process control systems according to workplace procedures
- taking corrective action in response to out-of-specification results in line with own role and responsibilities
- following work health and safety procedures, including:
 - responding to and/or reporting equipment failure
 - locating emergency stop functions on equipment
 - following isolation and lock out or tag out procedures to take pastry production process and related equipment off-line in preparation for cleaning and/or maintenance
- completing workplace records
- applying environmental and food safety policies and procedures to work practices, including:
 - maintaining work area to meet housekeeping standards
 - cleaning and sanitising equipment according to workplace procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of the pastry production process
- procedures for selecting ingredients and materials for pastry production, including:
 - recipe and production specifications
 - supply, condition and quality of ingredients
- types of pastry ingredients, including:
 - flour
 - water
 - ice
 - animal fat
 - vegetable fat
 - salt
 - pre-mixes

- baking powder
- melinta
- metrex
- sodium propate
- rework pastry
- sugar
- yeast
- types of equipment, including:
 - weighing equipment
 - mixing equipment
 - laminating and rolling equipment
 - cutting and stacking equipment
 - testing equipment
 - spike rollers and cutters
 - conveyors
 - rework bins
- procedures for starting, operating, monitoring and adjusting pastry production process equipment to achieve production outcomes, including setting up and starting up mixers, rollers and laminating processes
- procedures for monitoring control points and conducting inspections to confirm process remains within specification
- procedures for rolling and laminating dough to specification, including:
 - ensuring in-line hoppers are filled with flour to prevent pastry sticking to rollers
 - roller settings are within specification
 - checking pastry thickness, fat percentage and number of pastry layers
- procedures for monitoring supply and flow of materials to and from the laminating process and equipment operation to confirm process remains within specification
- procedures for cutting and stacking or rolling pastry according to production requirements
- basic operating principles of pastry production equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - purpose and location of sensors and related feedback instrumentation
- typical equipment faults and related causes, including signs and symptoms of faulty equipment, loss of power, and early warning signs of potential problems
- basic operating principles of process control, including the relationship between control panels and systems and pastry production equipment
- key features of the flow of the pastry production process and the effect of outputs on customer satisfaction and downstream processes, including filling, forming and baking
- quality requirements, including:

- materials and ingredients and effect of variation on pastry production process performance
- finished pastry
- pastry production process specifications, procedures and operating parameters, including:
 - preparing dough
 - laminating
 - rolling
 - cutting and stacking pastry
- operating requirements and parameters and corrective action required where operation is outside specified operating parameters
- methods used to monitor the pastry production process, including:
 - inspecting, measuring and testing processes
 - inspection or test points (control points) in the process
 - related procedures and recording requirements
- common causes of variation and corrective action required, including the relationships between time and temperature and humidity in the pastry production process
- following work health and safety procedures, including:
 - limitations of personal protective equipment
 - routine shut down requirements
 - emergency shut down procedures
 - procedures to follow in the event of a power outage
 - isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental and food safety issues and controls relevant to pastry production process, including:
 - waste/rework collection and handling procedures
 - contamination and food safety risks
 - cleaning and sanitation procedures.

Assessment Conditions

Assessment of this unit of competency must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and material:
 - personal protective clothing and equipment
 - pastry production equipment
 - ingredients to produce pastry products
 - documentation or technology for recording information
 - cleaning procedures, materials and equipment
- specifications:

- work instructions including control points and pastry production parameters
- production schedule, and recipe and batch specifications for pastry products
- information on equipment capacity and operating parameters
- workplace procedures for pastry production process
- relationships (internal and/or external):
 - workplace supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK3001 Operate a dough mixing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a dough mixing process.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a dough mixing process in a production baking environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare dough making equipment and process for operation	1.1 Identify and fit personal protective equipment required for operation 1.2 Identify and confirm cleaning and maintenance status 1.3 Weigh or measure ingredients to meet recipe requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Fit and adjust mixing equipment in accordance with operating requirements 1.5 Enter processing and operating parameters to meet safety and production requirements 1.6 Check and adjust equipment performance as required 1.7 Carry out pre-start checks as required by workplace procedures
2. Operate and monitor dough mixing process	2.1 Start up the dough mixing process according to workplace procedures 2.2 Introduce ingredients to mixing process in correct sequence and quantity 2.3 Monitor equipment and identify and report variations in operating conditions 2.4 Monitor process to confirm dough meets specifications 2.5 Identify and rectify or report outcomes that fail to meet product specifications 2.6 Transfer finished dough according to workplace procedures 2.7 Maintain work area and conduct activities according to workplace procedures, food safety and environmental guidelines 2.8 Maintain workplace records in required format
3. Shut down the process	3.1 Identify appropriate shutdown procedure 3.2 Shut down process safely and clean equipment according to workplace procedures 3.3 Identify and report maintenance issues according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and directions for the safe

Skill	Description
	operation of equipment when operating the dough mixing process
Writing	- Record maintenance requirements - Record equipment failure
Numeracy	- Confirm settings including mixing rate, mixing time, water and flour temperature - Monitor supply and flow of materials to and from the dough making process
Navigate the world of work	- Apply workplace procedures to own role and responsibilities and seek clarification or other assistance when required - Maintain hygiene standards and hazard free work area
Interact with others	Report dough making process performance to relevant personnel using required communication method
Get the work done	Identify routine problems and implement standard solutions according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK3001 Operate a dough mixing process	FDFPB3001A Operate a dough mixing process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK3001 Operate a dough mixing process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated all steps of the dough mixing process at least once, including:

- identifying and acquiring ingredients and personal protective equipment required for the process
- safely conducting pre-start checks on process equipment
- loading ingredients in correct quantities and sequences for the recipe and the process
- starting, operating, monitoring and adjusting process equipment to ensure that product meets specifications
- taking corrective action in response to results that fail to meet specifications
- completing required workplace documentation
- safely shutting down process and cleaning equipment according to workplace requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- purpose and basic principles of dough-making process, including components of wheat, flour types and grades relevant to products produced, yeast activity and dough development
- effects of variation in ingredient quality on the dough produced
- basic operating principles of equipment including equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- settings relevant to dough making equipment being used, including:
 - mixing rate
 - mixing time and work input

- ice and water requirements
- water temperature
- speed
- flour temperature
- cooling
- vacuum delay and level
- slurry addition
- flow of the dough-making process, including the stages and changes which occur during baking, and the effect of outputs on downstream processes
- significance of factors, such as dough temperature, development, time, water addition and temperature, yeast activity
- required characteristics of dough and effect of dough characteristics and variation on the final product
- operating requirements and parameters and corrective action required where operation is outside specified parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems, and procedures and responsibilities for addressing issues
- methods used to monitor the dough making process, including as inspecting, measuring and testing
- health and food safety risks associated with the dough making process and related control measures
- requirements of different shutdowns as appropriate to the dough making process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- procedures and responsibility for reporting production and performance information
- workplace cleaning procedures for the dough making process
- environmental issues and controls relevant to the dough making process, including waste collection and handling procedures.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - dough mixing process and related equipment and services
 - ingredients to be processed
 - cleaning materials and equipment
 - workplace record keeping system
- specifications:

- work procedures, including advice on safe work practices, cleaning, food safety, quality, cleaning and environmental requirements
- manuals related to operation of dough making equipment
- dough recipe(s).

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK3002 Operate a final prove and baking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down the process used to carry out the final proving and baking of dough.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a final prove and baking process in a baking production environment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare final proving and baking equipment process for operation	1.1 Supply dough to final prover to meet production and batch requirements 1.2 Confirm cleaning and maintenance requirements and status 1.3 Use appropriate personal protective equipment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Fit and adjust machine components and related attachments to meet operating requirements 1.5 Enter operating parameters to meet safety and production requirements 1.6 Check and adjust equipment performance as required 1.7 Perform pre-start checks according to workplace procedures
2. Operate and monitor final proving and baking process	2.1 Start up and operate final proving and baking process according to workplace procedures 2.2 Monitor equipment to identify variations in operating conditions 2.3 Monitor process to confirm products meet relevant specifications 2.4 Identify, rectify or report products that fail to meet specifications 2.5 Maintain work area and conduct activities according to housekeeping standards, food safety and workplace environmental guidelines 2.6 Maintain workplace records in required format
3. Shut down the final proving and baking process	3.1 Identify appropriate shutdown procedure 3.2 Shut down and clean process according to workplace procedures 3.3 Identify and report maintenance issues according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and directions for the safe operation of equipment during the final prove and baking process
Writing	- Record maintenance requirements - Record equipment failure
Numeracy	- Interpret settings for final prover time, temperature and humidity - Interpret settings for oven time and temperature

Skill	Description
Navigate the world of work	• Apply workplace procedures to own role and responsibilities and seek clarification or other assistance when required • Maintain hygiene standards and hazard free work area
Interact with others	• Report final prove and baking process performance to relevant personnel using required communication method
Get the work done	• Identify routine problems and implement standard solutions according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK3002 Operate a final prove and baking process	FDFPB3002A Operate a final prove and baking process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK3002 Operate a final prove and baking process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has demonstrated the entire proving and baking process at least once, including:

- confirming final prove and baking processing requirements
- safely conducting pre-start checks of final prove and baking process
- safely starting, operating, monitoring and adjusting final proving and baking process equipment and conducting inspections to confirm process conforms to specifications
- taking corrective action in response to results that fail to meet specifications
- completing required workplace documentation
- complying with food safety requirements
- safely shutting down process and cleaning equipment according to workplace requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the purpose and basic principles of each stage of the final proving and baking process
- basic operating principles of equipment, such as main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- flow of the final proving and baking process and the effect of outputs on downstream processes
- changes that occur in dough during baking, including starch gelatinisation, gluten coagulation and enzyme activity, and their effect on the final product
- the effect of process variables, such as time, temperature and humidity on process stages
- the effect of yeast activity on the end product

- quality characteristics to be achieved by final proving and baking process, including factors influencing crust formation and colour
- quality requirements of materials and effects of variation on final prove and baking process performance
- operating requirements, parameters and corrective actions required if operations fall outside specified parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment
- methods used to monitor the final proving and baking process, such as inspecting, measuring and testing as required by the process
- inspection or test points (control points) in final prove and baking process and the related procedures and recording requirements
- contamination and food safety risks associated with the final prove and baking process and related control measures
- possible work health and safety hazards and controls relevant to the work process, including the limitations of personal protective equipment
- requirements of different shutdowns as appropriate to the final prove and baking process and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- workplace cleaning and sanitation procedures
- environmental issues and controls relevant to the final prove and baking process, including waste collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - final proving, baking and depanning process and related equipment and services
 - panned dough
 - dough transfer equipment
 - cleaning materials and equipment
 - workplace record keeping system
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality, cleaning and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule and batch instructions
 - documentation and recording procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPBK3003 Operate a dough make up process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, adjust and shut down a dough make up process.

This unit applies to individuals who apply basic operating principles to the operation and monitoring of a dough make up process in a baking production environment

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Production baking (PBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare divider, rounder, moulder, panning equipment and process for operation	1.1 Confirm availability of dough to meet operating requirements 1.2 Identify and confirm cleaning and maintenance requirements 1.3 Use appropriate personal protective equipment

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Fit and adjust machine components and related attachments 1.5 Enter processing and operating parameters to meet safety and production requirements 1.6 Check and adjust equipment performance as required 1.7 Carry out pre-start checks according to workplace requirements
2. Operate and monitor the dough make up process	2.1 Start and operate the dough make up process according to workplace procedures 2.2 Monitor equipment operation and identify variations in operating conditions 2.4 Monitor process to confirm dough pieces meet required specifications 2.5 Identify, rectify or report products that fail to meet specifications 2.6 Maintain work area and conduct activities according to housekeeping standards, food safety and workplace environmental guidelines 2.7 Maintain workplace records in required format
3. Shut down the dough make up process	3.1 Identify appropriate shutdown procedures 3.2 Shut down and clean process according to workplace procedures 3.3 Identify and report maintenance requirements and report according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret standard operating procedures and directions for the safe operation of equipment for the dough make up process
Writing	- Record maintenance requirements - Record equipment failure
Numeracy	Confirm pre-start check including divider speed, weight setting

Skill	Description
	and oil supply Confirm dough weight, size and shape remain within specifications
Navigate the world of work	- Apply workplace procedures to own role and responsibilities and seek clarification or other assistance when required - Maintain hygiene standards and hazard free work area
Interact with others	Report dough make up process performance to relevant personnel using required communication method
Get the work done	Identify routine problems and implement standard solutions according to workplace guidelines

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPBK3003 Operate a dough make up process	FDFPB3003A Operate a dough make up process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPBK3003 Operate a dough make up process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least occasion, demonstrated all steps of the dough make up process, including:

- confirming dough make up processing requirements
- safely conducting pre-start checks of the dough make up process
- confirming supply of oiling pans, setting pan stops and guides for panning unit
- safely starting, operating, monitoring and adjusting process equipment and conducted inspections to confirm process conforms to specifications including:
 - dough height in hopper
 - dough weight
 - oil flow to divider
 - size and shape of dough piece
 - skin formation during intermediate proof
 - presence of 'doubles'
 - process variables such as time, temperature and humidity
- taking corrective action in response to results that fail to meet specifications
- completing required workplace documentation
- complying with food safety requirements
- safely shutting down process and cleaning equipment according to workplace requirements.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the purpose and basic principles of each stage of the dough make up process

- basic operating principles of equipment including main equipment components, status and purpose of guards, equipment operating capacities and applications, and the purpose and location of sensors and related feedback instrumentation
- flow of the dough make up process and the effect of outputs on downstream processes
- effect of process variables including time, temperature and humidity on process stages
- procedures for carrying out pre-start checks, including:
 - divider speed, weight setting and oil supply
 - air flow from fans in rounder
 - intermediate proving process airflow
 - moulding process settings, including sheeting, sealing board height and width, four piecing and roller adjustments
 - panning process settings, including side guides, sealing board, knives, folders and side belts
- effect of process stages including moulding on dough structure
- quality characteristics to be achieved by the dough make up process
- quality requirements of materials and effects of variation on the dough make up process
- operating requirements and parameters and corrective action required if operation falls outside specified operating parameters
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- methods of monitoring dough make up process, such as inspecting, measuring and testing as required
- inspection or test points (control points) in dough make up process and the related procedures and requirements
- contamination and food safety risks associated with the dough make up process and related control measures
- possible work health and safety hazards and controls relevant to the work process, including the limitations of personal protective equipment
- requirements of different shutdowns and workplace production requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- cleaning methods and procedures
- isolation, lock out or tag out procedures and responsibilities
- cleaning and sanitation procedures
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the dough make up process, including waste collection and handling procedures related to the process.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:

- personal protective equipment
- dough make up and transfer equipment and services
- dough to be processed
- workplace record keeping system
- specifications:
 - work procedures, including advice on safe work practices, food safety, quality, cleaning and environmental requirements
 - information on equipment capacity and operating parameters
 - production schedule and batch instructions
 - sampling schedules and test procedures and equipment as required

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL3001 Support and mentor individuals and groups

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to model appropriate work practices, provide feedback to groups and individuals, and facilitate group processes.

This unit applies to individuals who work under broad direction and take responsibility for their own work and may have some formal responsibility for managing others. This includes working in a range of known contexts and completing routine activities.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Support others in the work area	1.1 Mentor individuals to meet work requirements according to workplace procedures 1.2 Compare individual work performance against expected workplace standards 1.3 Ensure performance is monitored and appropriate action is taken

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to workplace procedures 1.4 Provide feedback to individual on performance according to workplace procedures
2. Facilitate group processes	2.1 Determine purpose of group process and plan group involvement 2.2 Gather information and develop a proposed process outcome through discussions with the group 2.3 Engage the members of the group to ensure decisions are made and agreed according to workplace procedures 2.4 Record the agreed outcomes and implement process in a timely manner

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Writing	Accurately records and completes organisational documents using clear language and correct spelling, grammar and terminology
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information
Interact with others	- Uses a range of strategies to establish a sense of connection and build rapport with co-workers - Cooperates with others and contributes to the improvement of work practices
Get the work done	- Contributes to continuous improvement of current work practices by applying basic principles of analysis - Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Addresses less predictable problems and initiates standard procedures in response, applying problem-solving processes in determining solutions - Accepts responsibility and ownership for the task and makes

Skill	Description
	decisions on completion parameters and the need for coordination with others

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL3001 Support and mentor individuals and groups	FDFPPL3003A Support and mentor individuals and groups	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL3001 Support and mentor individuals and groups

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has supported and mentored one individual on at least one occasion and a group on at least one other occasion, including:

- modelling behaviour and performance consistent with company policy and procedures
- supporting others in their behaviour and performance
- providing feedback on performance and taking appropriate action
- planning and organising group activities to engage participation
- determining, recording and implementing clear group process outcomes.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- company policies and procedures as they apply to the work area
- regulations and legislative requirements, including:
 - sexual discrimination
 - harassment and bullying
 - equal employment opportunity
 - anti-discrimination
 - racial vilification
 - work health and safety
 - food safety
 - environmental management
- industry awards and workplace agreements to develop an awareness of the main issues covered as they affect day-to-day work arrangements

- techniques for structuring and explaining work-related information to meet the needs of people in the work area
- interpersonal skills, including appropriate questioning, listening and feedback techniques
- workplace arrangements for training/assessment and related responsibilities
- boundaries of responsibility and related procedures for feedback, counselling and disciplinary procedures
- formal arrangements and responsibilities for consulting others relating to work role
- meeting procedures and recording requirements as relevant in the workplace
- basic group process facilitation procedures, including:
 - planning group processes
 - identifying the purpose
 - confirming the appropriate attendance
 - decision making
 - documenting basic group processes
- communications skills relevant to working with individuals and groups.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - systems and programs in the workplace to support development and mentoring of others
 - relevant resources to support mentoring role and responsibilities
- specifications:
 - regulatory, licensing, and legislative requirements
 - industrial awards and agreements
 - workplace policies, codes of practice and procedures
 - workplace systems and procedures for consultation, feedback, counselling and discipline
 - information systems, including recording and retrieval systems
- relationships (internal and/or external):
 - opportunities to interact with others using typical workplace communication processes.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL3002 Establish compliance requirements for work area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to establish compliance requirements that apply to work operations in a production environment where the experienced operator or supervisor is responsible for ensuring compliance requirements are identified for work operations in their area of responsibility.

This unit applies to individuals who would typically work under direction and is required to operate within established compliance procedures in relations to health and safety, food safety, feed safety or environmental management.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify compliance requirements	1.1 Review existing operating procedures and specifications to identify compliance requirements 1.2 Make enquiries within the workplace to identify compliance requirements according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Access information from external organisations and regulatory authorities to determine compliance requirements 1.4 Assess the purpose and scope of compliance requirement and impact on work to be performed
2. Establish compliance arrangements in work area	2.1 Confirm and communicate compliance requirements to other staff in work area according to workplace procedures 2.2 Source briefings, training and other support from internal and external support staff to ensure compliance is understood 2.3 Identify procedures for achieving and monitoring compliance in own work area 2.4 Identify procedures to be followed for non-compliance events

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Reads and interprets procedures, specifications and other documentation from a variety of sources and consolidates information to determine requirements
Writing	Accurately records and completes organisational documents using clear language and correct spelling, grammar and terminology
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information
Navigate the world of work	Ensures an up-to-date understanding of legislative requirements
Get the work done	- Contributes to continuous improvement of current work practices by applying basic principles of analysis - Takes responsibility for planning, sequencing, and prioritising tasks and workload for efficiency and effective outcomes - Addresses problems and initiates standard procedures in response,

Skill	Description
	applying problem-solving processes to determine effective solutions • Accepts responsibility and ownership for the task and makes decisions on completion parameters and the need for coordination with others

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL3002 Establish compliance requirements for work area	FDFPPL3006A Establish compliance requirements for work area	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL3002 Establish compliance requirements for work area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has established compliance requirements for work areas on at least one occasion, including:

- investigating and identifying compliance requirements and procedures for own work area
- assessing workplace procedures against compliance requirements to determine gaps
- sourcing information and training to assist in establishing an effective compliance framework in work area
- determining the work procedures required to follow, observe and respond to compliance issues.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- operating procedures, specifications and other workplace information
- information required for compliance for own work area
- communication skills to obtain and share information
- requirements for establishing and monitoring procedures
- documenting compliance outcomes
- effect of work procedures on compliance factors in the work area
- purpose and intent of compliance in the workplace
- compliance policies and requirements relevant to own work area, including:
 - work health and safety
 - food safety
 - feed safety
 - environmental management
- data assessment methods relevant to monitoring compliance of own work area

- internal and external support personnel as sources for compliance requirements
- procedures to follow for non-compliance events
- consequences of non-compliance in the workplace.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - information systems and data collection technology
 - workplace/personnel access to collect data and observe compliance
- specifications:
 - workplace program documentation
 - compliance procedures and standards as applied in the workplace
 - relevant legislation, industry standards and codes of practice.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL4001 Manage people in the work area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to manage performance issues of people in the work area.

This unit applies to individuals with managerial responsibility for other people in a work area. It includes an understanding of different levels of response to performance issues, including formal procedures.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPPPL3001 Support and mentor individuals and groups

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Provide information on performance expectations	1.1 Ensure workplace policies and procedures are current, accessible and in formats appropriate to the audience 1.2 Ensure performance-related information is current, accessible and in formats appropriate to the audience 1.3 Communicate work expectations, plans and objectives to team members

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Provide coaching and support	2.1 Demonstrate appropriate work behaviours and procedures to individuals and groups 2.2 Identify skill development needs of individuals or groups according to workplace procedures according to workplace training need analysis practices 2.3 Provide targeted skill development support to improve individual or group performance 2.4 Encourage, value and reward positive performance according to workplace procedures
3. Manage performance issues	3.1 Identify signs of performance variation outside of that expected according to workplace objectives and targets 3.2 Investigate reasons for performance variance according to workplace procedures 3.3 Identify and implement appropriate responsive action to variances in performance 3.4 Establish process for monitoring performance improvement according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Analyses complex documentation from a variety of sources and consolidates information relating to performance policies and measures to determine requirements
Writing	- Documents outcomes and discussions using industry relevant terminology - Accurately records and completes performance-related organisational documents using clear language, correct spelling, grammar and terminology
Numeracy	Performs mathematical calculations to analyse performance data to inform performance outcomes

Skill	Description
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information on performance
Get the work done	- Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking - Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Applies systematic and analytical decision-making processes for complex and non-routine situations - Responds to problems requiring resolution, drawing on past experiences of performance measures
Interact with others	- Recognises when personal values and beliefs impact on work group activities and performance, and implements strategies to moderate the effect - Collaborates with others sharing information to build strong work groups, and manages behaviours that are not conducive to a productive environment

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL4001 Manage people in the work area	FDFPPL4001A Manage people in the work area	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL4001 Manage people in the work area

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has managed performance issues of people in the work area on at least two separate occasions, including:

- determining performance expectations and communicating effectively with individuals in the workplace
- identifying performance variances and collecting relevant information
- providing coaching and support to team members according to needs determined by performance outcomes
- monitoring performance and addressing performance issues according to organisational guidelines.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- negotiation and problem-solving skills for managing people in the workplace
- workplace feedback and performance management systems and responsibilities, including:
 - personal levels of authority
 - performance counselling
 - disciplinary procedures
- company policies, procedures and related communication systems
- effect of personal style and behaviour on others in the work area and the importance of establishing effective relationships with people in the work area
- performance expectations and related communication systems/processes
- signs of different levels of performance, including:
 - performance indicators and measures

- assessment strategies for performance
- patterns and behaviour that lead to poor performance
- patterns and behaviour that leads to exceptional performance
- options and strategies to address performance issues, including:
 - rewards
 - disciplinary actions
- systematic approaches for structuring a discussion on poor performance, including:
 - clear statement of the problem
 - explanation of why it is a problem
 - action or change required
 - follow up action
- workplace and legal requirements to document performance and behavioural issues, including:
 - legal processes
 - how reported information may be used
- industrial awards and workplace agreements on employee rights and responsibilities related to work performance and the relationship between the award and site agreements
- communication skills to consult and communicate with relevant personnel
- records and recording systems and requirements for managing people in the workplace
- principles of motivation and effective teamwork.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - workplace information recording systems, requirements and procedures
- specifications:
 - workplace policies and procedures
 - relevant industrial awards and agreements
- relationships (internal and/or external):
 - opportunities to interact with others using typical workplace communication processes

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL4002 Plan and coordinate production equipment maintenance

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to plan and coordinate maintenance activities for production equipment.

This unit applies to individuals who take responsibility for their own work and coordinate and oversee employees responsible for the maintenance of production equipment.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety legislation that apply to the workplace.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify maintenance requirements according	1.1 Determine the approach for maintaining production equipment 1.2 Source and assess advice on equipment maintenance requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
to workplace procedures	according to manufacturers' specifications 1.3 Assess and prioritise special maintenance requirements
2. Plan maintenance according to workplace procedures	2.1 Identify and secure resources required to carry out maintenance 2.2 Develop a maintenance schedule to provide reliable equipment performance with minimal disruption to production 2.3 Ensure the maintenance schedule takes account of production schedules, equipment capability, special maintenance requirements, efficient resource utilisation, workplace health and safety requirements, and workplace environmental guidelines 2.4 Record the maintenance schedule in the appropriate workplace format 2.5 Define and communicate responsibilities for implementing the maintenance schedule 2.6 Consult personnel affected by the maintenance program and advise of maintenance process
3. Monitor implementation of the maintenance schedule according to workplace procedures	3.1 Monitor progress of maintenance to identify variance to schedule 3.2 Identify, assess and address unplanned events that could affect the schedule 3.3 Identify and communicate potential failure to meet maintenance deadlines to relevant personnel in a timely manner
4. Contribute to the improvement of equipment reliability	4.1 Review equipment performance information to identify patterns or trends 4.2 Identify factors that affect equipment reliability 4.3 Consult production and maintenance personnel to identify opportunities to improve equipment reliability 4.4 Take action to improve equipment reliability 4.5 Review the maintenance schedule and related programs and procedures to reflect improvements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Reads and interprets manuals, specifications, and other documentation from a variety of sources and consolidates information to determine maintenance requirements - Analyses and consolidates test results and data from a range of sources, against defined criteria and requirements
Writing	Develops procedural material for a specific audience using clear and industry relevant language in order to convey explicit information, requirements and recommendations
Numeracy	Performs mathematical calculations to analyse maintenance data and scheduling statistics to inform maintenance activities
Oral communication	Uses collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information
Interacts with others	- Uses a range of strategies to establish a sense of connection and build rapport co workers - Elicits feedback from others in order to improve workgroup behaviours and processes
Get the work done	- Contributes to continuous improvement of current work practices by applying principles of analytical and lateral thinking - Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Applies systematic and analytical decision-making processes for complex and non-routine situations - Addresses problems and initiates procedures in response, applying problem-solving processes to determine solutions

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL4002 Plan and coordinate production equipment	FDFPPL4002A Plan and coordinate maintenance	Updated to meet Standards for Training Packages Minor changes to Performance Criteria	Equivalent unit

maintenance		for clarity	

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL4002 Plan and coordinate production equipment maintenance

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has planned and coordinated maintenance for production equipment, on at least two separate occasions, including:

- obtaining information and planning maintenance requirements for production equipment
- establishing and documenting a maintenance schedule
- coordinating the implementation and maintenance schedule with appropriate personnel
- managing unplanned maintenance issues
- assessing equipment reliability and contributing to improved maintenance schedules and procedures
- managed work health and safety, environmental and food safety requirements and responsibilities associated with maintenance activities.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- maintenance approaches and differences between reactive, preventative and proactive maintenance models, including:
 - reliability centred maintenance (RCM)
 - total productive maintenance (TCM)
- company systems, processes and responsibilities for:
 - collecting equipment condition information
 - analysing information
 - carrying out required servicing and maintenance
- sources of data on equipment performance and maintenance requirements, related recording systems and data analysis tools, including:
 - manufacturer specifications

- equipment capability data
- condition monitoring data
- equipment operation/performance reports and log sheets
- workplace environmental guidelines
- maintenance requirements and scheduling processes, including:
 - production process
 - impact of scheduling on production
 - maintenance activities
 - maintenance priorities
 - effect on related activities, including purchasing and contract management
- factors that influence the reliability of equipment, including:
 - equipment capability
 - equipment/process design
 - operating conditions and practices
- methods used to measure effectiveness of maintenance, including:
 - plant availability
 - cost of maintenance
 - downtime
 - alternate resource utilisation
- work health and safety, environmental and food safety requirements and responsibilities associated with maintenance activities
- relevant personnel and departments to be consulted/notified of maintenance schedule and related amendments, including the information relevant to each group/person
- conditions that can affect achievement of the maintenance schedule, including:
 - unusual or unplanned conditions
 - related options for response to equipment breakdowns/emergencies
- communication skills to consult and communicate with relevant personnel
- recording systems and requirements, including relevant software packages
- process improvement procedures for production equipment
- capacity of maintenance service suppliers to provide required services.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - production equipment
- specifications:
 - maintenance scheduling system and associated information and communication systems

- relevant standard operating procedures (SOPs)
- workplace information recording systems, requirements and procedures
- access to Work Health and Safety Acts or Occupational Health and Safety Acts, regulations and related industry standards and codes of practice
- workplace environmental requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL4003 Schedule and manage production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to plan, monitor and adjust schedules to meet operational requirements for production activities.

The unit applies to individuals who take responsibility for their own work and provide and communicate solutions to others with some responsibility for planning and scheduling production.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify production requirements	1.1 Use forecast and sales information to identify production requirements according to workplace procedures 1.2 Identify production priorities to satisfy demand
2 Confirm resource requirements for production requirements	2.1 Check stock levels of raw materials, ingredients, packaging components and consumables are available and can fulfil production requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	2.2 Check equipment capacity and status are ready and available for production activities according to workplace procedures 2.3 Ensure human resources are available against production requirements
3 Develop and communicate the production schedule	3.1 Develop the production schedule to meet demand and delivery timelines within production capacity and budget 3.2 Ensure the production schedule takes account of stock levels, storage capacity, equipment capacity and product mix to minimise stock and product holdings and maximise production efficiency 3.3 Record the production schedule in the appropriate workplace format 3.4 Make available the production schedule to relevant personnel in a timely manner
4 Monitor production schedule	4.1 Monitor production to identify actual and potential barriers to achieving the schedule 4.2 Monitor resource usage rates to identify potential shortages 4.3 Identify, assess and address unplanned events that could affect the schedule
5 Adjust production schedules	5.1 Adjust production schedules to take account of identified changed conditions 5.2 Negotiate and communicate changes to the production schedule to relevant personnel in a timely manner 5.3 Identify resource implications of amended schedules and access resources to meet requirements 5.4 Identify and communicate potential failure to meet delivery deadlines to relevant personnel in a timely manner 5.5 Amend schedule documentation as required to meet workplace reporting requirements
6 Review production schedule development process	6.1 Review the production scheduling process to identify opportunities for improvement 6.2 Identify, investigate and report variances in production against schedule to appropriate personnel 6.3 Consult personnel responsible for implementing the schedule to identify improvement opportunities

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	6.4 Revise the scheduling process to reflect improvements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Analyses and consolidates test results and data from a range of sources, against defined criteria and requirements
Writing	Writes, edits and proofreads documents to ensure clarity of meaning, and accuracy and consistency of information
Numeracy	Performs mathematical calculations to analyse labour, costs and quantities to accurately produce schedules and manage resources and budget
Oral communication	Uses collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information and to confirm understanding
Navigate the world of work	Accepts responsibility and ownership for the task and makes decisions on completion parameters and the need of coordination with others
Interact with others	- Selects and uses appropriate conventions and protocols when communicating with clients and co-workers in a range of work contexts - Elicits feedback and provides feedback to others in order to improve workgroup behaviours
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Applies systematic and analytical decision-making processes for complex and non-routine situations - Investigates new and innovative ideas as a means to continuously improve, work practices and processes - Monitors progress of plans and schedules, and reviews and changes them to meet new demands and priorities

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL4003 Schedule and manage production	FDFPPL4003A Schedule and manage production	Updated to meet Standards for Training Packages Minor Changes to PCs for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL4003 Schedule and manage production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has scheduled and managed production on at least one occasion, including:

- confirming production requirements and resource implications
- establishing and documenting a production schedule
- coordinating implementation of production schedule
- ensuring production schedule is communicated and reported to all appropriate personnel
- identifying and managing unplanned production issues and amending the process
- reviewing and assessing production outcomes against schedule and making required adjustments to plans.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- role and scope of the scheduling function, including:
 - flow of information to and from the scheduling process
 - impact of scheduling for related planning, purchasing, production and despatch processes
- factors to be taken into account in planning the schedule, including the inter-relationships between factors, including:
 - customer requirements
 - stock levels and supply options
 - use-by codes
 - production capacity and availability
 - labour requirements and availability
 - product compatibility

- capacity of related processes and/or storage facilities
- transport capacity
- consequences of failing to meet delivery timelines, including:
 - customer expectations
 - stock-out fines
 - effects on customer relationship
- company's preferred approach to managing customer relations
- planning process and efficiencies to meet production requirements, including:
 - stock shelf-life of product and consumables
 - product compatibility characteristics of raw materials/ingredients
 - packaging components
 - availability of consumables
- equipment capacity to ensure that production quantities and timelines are achievable
- methods used to monitor actual-to-planned production and key performance indicators (KPIs)
- communication strategies used when consulting relevant personnel and departments for production schedule and related amendments
- conditions that can affect achievement of schedule, including conditions that are unusual or unplanned and related options for response
- options for maximising resource utilisation and minimising waste, including options for alternate resource allocation in response to unplanned events
- recording systems and requirements required for planning and scheduling production
- process improvement procedures for production activities
- competencies required by the work process and competencies required by the work team.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - production area and related functions and resources
- specifications:
 - relevant standard operating procedures (SOPs)
 - scheduling systems and associated information and communication systems
 - workplace information recording systems, requirements and procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL4004 Optimise a work process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to assess, investigate and make recommendations to optimise the performance of a work process, system or area.

The unit applies to individuals responsible for facilitation of consultation and performance improvement processes. This includes communicating solutions for a range of predictable and unpredictable problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FDFPPL3001A Participate in improvement processes

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish work process scope	1.1 Identify the scope and flow of the work process 1.2 Identify and collect work process information according to workplace practices
2. Assess work process performance	2.1 Evaluate work process performance against plan and benchmark information

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	2.2 Investigate variations in work process performance 2.3 Identify opportunities for improvement
3. Develop a plan to optimise process performance	3.1 Develop and report recommendations for improvements in the appropriate format 3.2 Present an implementation plan in the appropriate format according to workplace policy
4. Implement, monitor and evaluate process improvement	4.1 Review workplace documentation to reflect process improvement 4.2 Identify and communicate changes to roles and responsibilities of workplace personnel involved in implementing the optimisation plan 4.3 Identify, negotiate and secure resources to support implementation 4.4 Implement and monitor process changes 4.5 Apply continuous improvement procedures to evaluate and refine process optimisation

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Reads and interprets process information and work documentation, and consolidates information to assess and determine requirements and performance
Writing	Accurately records information and prepares correspondence and documentation using clear language to organisational formats and protocols
Numeracy	Performs mathematical calculations to interpret and compare numerical information against benchmarks
Oral communication	Effectively participates in verbal exchanges using collaborative and inclusive techniques to convey and clarify information and negotiate with others
Interact with others	Selects and uses appropriate conventions and protocols when communicating with co-workers in a range of work contexts

Skill	Description
Get the work done	• Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes • Addresses problems and initiates standard procedures in response, applying problem-solving processes in determining solutions • Investigates new and innovative ideas as a means to continuously improve work practices and processes through consultation, formal and analytical thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL4004 Optimise a work process	FDFPPL4004A Optimise a work process	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL4004 Optimise a work process

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has optimised a work process on at least one occasion, including:

- establishing parameters of work process
- analysing performance measures and identifying opportunities for improvement
- developing plan to optimise work process
- appropriately engaging other personnel in planning implementation
- monitoring implementation and analysing outcomes
- engaging continuous improvement processes to sustain and improve outcomes.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- process/workflow mapping purpose and techniques
- characteristics of the work process, including typical factors that affect process performance, including:
 - fluctuations in demand/throughput
 - quality of raw material/ingredient inputs
 - human resources availability/competencies
 - equipment configuration, capacity and performance
 - process capability
 - changeover times
 - cost of services
- criteria against which to assess performance, including key performance indicators (KPIs), production plans/schedules, budgets and relevant benchmark information

- technical knowledge to identify and assess current performance and identify improvement opportunities and proposals
- process improvement tools and techniques
- related workplace documentation and systems
- relevant personnel and departments to be consulted/notified of optimisation implementation plan
- recording systems and requirements for reporting on work processes.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - process improvement tools and techniques
- specifications:
 - information systems, including recording and retrieval systems
- relationships (internal and/or external):
 - opportunities to interact with others using typical workplace communication processes

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL4005 Manage supplier agreements and contracts

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to manage internal and external agreements for the supply of goods and/or services.

The unit applies to individuals with an understanding of supply chain relationships and arrangements who are responsible for the evaluation and management of new and existing contractual arrangements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Establish contractual arrangements	1.1 Document and agree specifications for the delivery of goods and/or services according to workplace procedures 1.2 Develop and document criteria for selection of suppliers according to workplace procedures 1.3 Identify and assess potential suppliers against selection criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Select preferred supplier according to the selection criteria and workplace procedures 1.5 Negotiate, agree and document supply contracts with parties 1.6 Develop contingency plans in the event of supplier failure to deliver
2. Administer and evaluate delivery of goods and/or services against agreements	2.1 Assess the quality of goods and services supplied against specifications 2.2 Determine and document non-compliance and implement corrective action within the terms of contractual arrangements 2.3 Manage relationships with suppliers to support effective delivery according to workplace procedures 2.4 Review and renegotiate vendor agreements as required to ensure timely delivery and cost-effective supply of quality goods and services

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Analyses and consolidates information and data from a range of sources, against defined criteria and requirements, and checks for accuracy and completeness
Writing	Accurately records information, prepares contracts and correspondence using clear language and organisational formats and protocols
Numeracy	Applies modelling skills to identify, analyse and evaluate costings, production scheduling, time durations and human resource allocations for contract development and monitoring
Oral communication	Uses collaborative and inclusive techniques including active listening, questioning and verbal and non-verbal signals to convey and clarify information and to confirm understanding during negotiations
Navigate the world of	Takes responsibility for following explicit and implicit policies, procedures and legislative requirements for contract development

Skill	Description
work	
Interact with others	• Implements strategies for a diverse range of colleagues and clients in order to build rapport and foster strong relationships
Get the work done	• Monitors progress of production plans and schedules, and reviews and manages them to meet new demands and priorities • Applies systematic and analytical decision-making processes for complex and non-routine situations • Investigates new and innovative ideas as a means to develop contacts through negotiation and analytical thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL4005 Manage supplier agreements and contracts	FDFPPL4007A Manage supplier agreements and contracts	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL4005 Manage supplier agreements and contracts

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has managed internal and external agreements for the supply of goods and/or services on at least two separate occasions, including:

- determining resource requirements for work area
- establishing contractual conditions and determining most suitable supplier
- monitoring supply against agreements and contracts, and promptly identifying and acting on variances
- establishing supply contingencies
- maintaining relationships with suppliers to support service.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- approaches to supply chain management, including:
 - customer-led models and efficient consumer response (ECR)
 - contrast between independent company operations versus chain partnership arrangements
 - the implications of a supply chain approach for the nature of the relationships between the company and its suppliers, including level of information sharing and cooperation
- the company's approach to supply chain management, and related systems and documentation in place to support internal management and supplier relationship management, including levels of authority
- appropriate technical knowledge to determine capacity of a supplier to deliver and to assess quality of goods/service supplied
- legal rights and responsibilities of both the company and the supplier

- the role of benchmarking in determining appropriate criteria for supplier selection and contract management
- appropriate measures of contract delivery and relative importance/weighting given by the company
- induction and duty of care responsibilities for contractors working on-site where relevant.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - sample agreements and documents
 - technical support and advice as appropriate
- specifications:
 - workplace procurement policies and related documentation and systems
 - relevant legislation, codes of practice and agreements
 - information management systems, including planning, recording and reporting systems
- relationships (internal and/or external):
 - access to suppliers of goods and services.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPPPL4006 Manage a work area within budget

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Application

This unit of competency describes the skills and knowledge required to plan, allocate and monitor work to achieve required outcomes within budget allocations.

The unit applies to individuals who are team leaders and are typically required to reach decisions on resource utilisation within budget constraints, and provide and communicate solutions to a range of predictable and sometimes unpredictable problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

People, Planning and Logistics (PPL)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify and plan within budget parameters	1.1 Determine budget requirements and parameters for work area 1.2 Determine, confirm and allocate resources to achieve production schedule within budget and according to workplace policy
2. Monitor resource utilisation against budget	2.1 Monitor performance to identify actual or potential variance to budget

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	2.2 Identify, investigate and report variances to budget according to workplace reporting requirements 2.3 Determine and communicate potential failure to achieve targets within budget to appropriate personnel in a timely manner 2.4 Take action to minimise negative impact of variance
3. Communicate budget information	3.1 Make budget information available to relevant personnel in a timely manner 3.2 Report budget information in the appropriate format and timelines according to workplace reporting requirements 3.3 Make contributions to the development of workplace budgets

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Analyses and consolidates information and data from a range of sources, against defined criteria and requirements and checks for accuracy and completeness
Writing	Prepares and produces documents and reports that convey complex relationships between performance data and budget for further analysis
Numeracy	Performs mathematical calculations to analyse financial information, costs and values to accurately determine performance
Oral communication	Presents complex financial information in formal situations using clear and convincing language, tone and pace appropriate for the audience and purpose
Navigate the world of work	Takes responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	Selects and uses appropriate conventions and protocols when communicating budget outcomes with co-workers
Get the work done	Makes routine decisions and implements standard procedures for routine tasks, using formal decision-making processes for more

Skill	Description
	complex and non-routine situations • Contributes to continuous improvement of budget and work practices by applying principles of analytical thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPPPL4006 Manage a work area within budget	FDFPPL4006A Manage a work area within budget	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPPPL4006 Manage a work area within budget

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has managed a work area within budget, on at least one occasion, including:

- determining resource requirements for work area
- establishing budget and allocations for work area
- monitoring performance against budget targets and promptly identifying and acting on variances to minimise impact
- ensuring budget is communicated and reported to all appropriate personnel.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the basis on which budgets developed for the work area are constructed, including:
 - what information is provided to budget planners
 - how to read and interpret budget information
 - how to apply budget information
 - monitoring/reviewing work performance
- basic accounting concepts, including:
 - fixed and variable costs
 - rate of return
 - methods of allocating indirect costs
 - methods of measuring investment value
- accounting models, including:
 - the difference between traditional accounting approaches and more recent developments

- accounting implications of value added management
- life-cycle costing
- triple bottom line
- company approach to cost management so that decisions on resource allocation are within both budget allocations and company philosophy/preferred approach
- resource requirements to meet production and related costs
- process knowledge to identify factors likely to impact on achieving budget
- relevant personnel and departments to be consulted/advised of budget information, including:
 - information relevant to each group/person
 - the importance of providing accurate and timely information to each of the stakeholders
- options for maximising resource utilisation and minimising costs
- budget recording and reporting systems and requirements
- process improvement procedures for managing budgets.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - resource and budget allocations
 - work performance information
- specifications:
 - cost management specifications and requirements
- relationships:
 - opportunities to interact with others using typical workplace communication processes

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK1001 Finish products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare finishing mediums and finish baked products in a food preparation environment.

The unit applies to individuals who undertake defined routine work activities under supervision. This includes identifying and reporting simple issues and problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product finishing task requirements with supervisor 1.2 Identify and report work health and safety hazards to supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Select and wear personal protective equipment as directed 1.4 Check work area and personal hygiene meet food safe conditions 1.5 Select finishing equipment and check readiness for use 1.6 Select finishing ingredients and check quality and quantity
2. Prepare finishing materials	2.1 Measure ingredient quantities to meet recipe specification 2.2 Combine and mix ingredients to make finishing mediums 2.3 Identify finishing medium problems, and report to supervisor
3. Apply finishes	3.1 Use finishing techniques to apply finishing mediums to products 3.2 Portion finished products as directed 3.3 Check finished products, and report identified problems to supervisor 3.4 Store finished products to meet food safe conditions
4. Complete work	4.1 Clean equipment and work area to meet food safe conditions 4.2 Dispose of waste according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from simple recipes, ingredient labels and simple end-product specifications
Oral communication	- Comprehends simple instructions - Asks clarifying questions and responds to answers
Numeracy	- Locates and interprets numerical information in simple recipes and product labels - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes
Navigate the world of work	Follows explicit procedures immediately relevant to own role

Skill	Description
Interact with others	Follows clearly defined instructions, seeking assistance when necessary
Get the work done	With assistance, sequences and implements the steps involved in completing finishing tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK1001 Finish products	FDFRB1001A Finish products	Updated to meet Standards for Training Packages Changes to elements and performance criteria to increase clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK1001 Finish products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has finished baked products, including:

- finishing at least one of the following three products:
 - simple sponge cakes
 - simple breads
 - simple non laminated pastries
- preparing and using at least three of the following nine finishing mediums:
 - seeds
 - savoury topping
 - egg wash
 - cream
 - icing
 - glaze
 - icing sugar
 - coconut or nuts
 - fruits
- using at least four of the following finishing techniques:
 - piping or spreading icing
 - simple piping using piping bags and nozzles for cream or icing
 - applying seeds to bread products
 - pre-prove scoring bread products
 - pre-bake finishing non laminated pastry products
 - post-bake finishing non laminated pastry products
 - post-bake finishing sponge cake products
 - applying savoury toppings to bread products
 - post-bake finishing products with coconut or nuts

- glazing
- dusting
- dipping.

The applied finishing must meet the supervisor's instructions.

The finished product must be stored in food safe conditions.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to finishing products
- food safe conditions applicable to using and storing finishing mediums, including:
 - temperature
 - containers
 - date labelling
 - sanitary cleanliness
- types and storage conditions of finishing mediums, including:
 - seeds
 - savoury toppings
 - egg wash
 - creams
 - icings
 - glazes
 - icing sugar
 - coconut or nuts
 - dried fruits
 - finishing techniques used to finish baked products, including:
 - simple sponge cakes
 - simple breads
 - simple non laminated pastries
- basic functions, safe use and cleaning methods of finishing equipment techniques for measuring ingredient quantities, including:
 - by weight
 - by volume
 - by count
 - by estimation
- basic principles of portioning products
- product storage requirements, including refrigeration and room temperature storage

- basic product finishing terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - an environment that accurately represents a food preparation area
- resources, equipment and materials:
 - personal protective equipment
 - bowls
 - piping bags and nozzles
 - scrapers
 - pallet knives
 - knives
 - products required to be decorated in the performance evidence
 - ingredients that meet finishing mediums required in the performance evidence
 - cleaning products and tools
- specifications:
 - simple recipe specifications for preparation of finishing mediums and finishing instructions required in the performance evidence
 - simple end-product quality requirements to meet the product and finishing types required in the performance evidence
- relationships (internal and/or external):
 - supervisor.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK2001 Assist non laminated pastry production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to assist in the production of non laminated pastry products in a food preparation environment.

The unit applies to individuals who undertake routine work, including identifying and solving predictable problems under supervision.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm work requirements for non laminated pastry production with supervisor 1.2 Identify and report work health and safety hazards to supervisor

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Select and wear personal protective equipment according to safety requirements 1.4 Check work area and personal hygiene meet food safe conditions 1.5 Select equipment and check readiness for use 1.6 Select ingredients and check quality and quantity 1.7 Prepare foils and trays for use
2. Mix and form pastry doughs	2.1 Measure ingredient quantities to meet recipe specification 2.2 Load, operate and monitor equipment to mix non laminated pastry dough 2.3 Roll and form dough to meet product type, and form into foils or place on trays 2.4 Check non laminated pastry dough to identify routine pastry problems, and report to supervisor
3. Bake pastry products	3.1 Confirm dough readiness and baking settings with supervisor 3.2 Set and warm oven to prepare for baking 3.3 Fill unbaked non laminated pastry products as required to meet product type 3.4 Load oven and monitor baking to achieve even bake 3.5 Unload and cool baked products to meet product type 3.6 Fill baked non laminated pastry product as required to meet product type 3.7 Check baked products to identify routine baked non laminated pastry product faults, and report to supervisor
4. Complete work	4.1 Clean equipment and work area to meet food safe conditions 4.2 Dispose of waste according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipe specifications, ingredient labels and end-product specifications
Numeracy	- Identifies and comprehends measurements, including ingredient quantities in recipe specifications, dates on ingredient labels, mixing times and speeds, baking temperatures and times, and dough and baked product dimensions - Estimates approximate quantities, and uses equipment to measure weights, volumes and dimensions - Uses understanding of three-dimensional shapes to form dough and check non laminated pastry product shapes
Oral communication	Uses listening and questioning techniques to communicate and obtain specific information and confirm understanding
Navigate the world of work	Follows explicit procedures immediately relevant to own role
Interact with others	Follows clearly defined instructions, seeking assistance when necessary
Get the work done	- With assistance, sequences and implements the steps involved in assisting non laminated pastry production - Uses digital technologies to set process parameters

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK2001 Assist non laminated pastry production	FDFRB2005A Assist cake, pastry and biscuit production	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK2001 Assist non laminated pastry production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has assisted non laminated pastry production, including:

- assisting production of the following three non laminated pastry products:
 - unfilled non laminated pastry product
 - filled non laminated pastry product with sweet pastry and sweet filling
 - filled non laminated pastry product with savoury pastry and savoury filling
- incorporating the following two filling techniques:
 - pre-bake filling
 - post-bake filling
- incorporating the following six production processes and techniques:
 - filling using a sweet filling
 - filling using a savoury filling
 - forming pastry products
 - cutting non laminated pastry
 - rolling non laminated pastry
 - baking non laminated pastry products
- baking using the following two pastry equipment types:
 - pastry foils or tins
 - baking trays
- checking the bake of the non laminated pastry by baked colour.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment applicable to assisting in pastry production
- food safe conditions applicable to assisting in pastry production
- types and storage requirements for:
 - flour
 - eggs
 - fats
- types of ingredient checks, including:
 - type
 - quantity
 - use-by date
 - damaged packaging
- pastry production processes, including:
 - mixing ingredients
 - shaping pastry doughs
 - pre-bake filling
 - post-bake filling
 - baking pastries
- techniques for measuring ingredients, including:
 - by weight
 - by volume
 - by count
 - by estimation
- typical baking parameters, including oven temperatures
- required characteristics of non laminated pastry doughs, including softness and feel
- required characteristics of baked pastry products, including:
 - baked colour
 - baking shrinkage
- techniques for cleaning the work area used in pastry production
- techniques for disposing of waste from pastry production
- basic pastry product and process terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a food preparation environment

- resources, equipment and materials:
 - personal protective equipment (PPE)
 - sink and wash area
 - mixing equipment
 - rolling pin
 - pastry foils or tins
 - baking trays
 - electronic or analogue scales
 - oven suitable to bake products specified in the performance evidence
 - ingredients to create the pastry products specified in the performance evidence
- specifications:
 - supervisor instructions
 - end-product specifications for the pastry products specified in the performance evidence
 - a production schedule for non laminated pastry that includes product quality requirements, scheduling, recipes to suit output requirements, sequence and mixing processes and baked parameters
- relationships (internal and/or external):
 - supervisor
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK2002 Use food preparation equipment to prepare fillings

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to prepare fillings for use in bread, cake or pastry products using food preparation equipment in a commercial baking environment.

The unit applies to individuals who undertake routine work under supervision. This includes identifying and providing solutions to a limited range of predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm baked product filling types and volumes with supervisor 1.2 Identify and report work health and safety hazards to supervisor 1.3 Select and wear personal protective equipment according to safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.4 Check work area and personal hygiene meet food safe conditions 1.5 Select food preparation equipment and check readiness for use 1.6 Check knives are sharp and ready for use 1.7 Select ingredients and check quality and quantity 1.8 Thaw, condition and reheat ingredients as required in food safe conditions to prepare for use
2. Prepare fillings	2.1 Measure ingredient quantities to meet recipe specification 2.2 Prepare ingredients using knives to make cuts 2.3 Blend and thicken cold fillings to meet recipe specifications 2.4 Blend and cook hot fillings to meet recipe specifications 2.5 Check fillings to identify routine filling faults, and report to supervisor 2.6 Cool cooked fillings to meet food safe conditions 2.7 Store prepared fillings to meet food safe conditions
3. Complete work	3.1 Clean equipment and work area to meet food safe conditions 3.2 Dispose of waste according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipe specifications and ingredient labels
Numeracy	- Identifies and interprets numerical information in recipes, including quantities, mixing speeds and times, and cooking temperatures and times - Uses understanding of angles, linear dimensions and shapes to cut ingredients to size and shape - Estimates approximate quantities, and uses equipment to measure

Skill	Description
	ingredient weights and volumes
Oral communication	Uses listening and questioning techniques to communicate and obtain specific information and confirm understanding
Navigate the world of work	Follows explicit procedures immediately relevant to own role
Interact with others	Follows clearly defined instructions, seeking assistance when necessary
Get the work done	With assistance, sequences and implements the steps involved in preparing fillings

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK2002 Use food preparation equipment to prepare fillings	FDFRB2002A Prepare fillings	Updated to meet Standards for Training Packages Changes to food preparation equipment and techniques	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK2002 Use food preparation equipment to prepare fillings

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has used food preparation techniques to prepare fillings, including:

- preparing and using the following ingredients in fillings:
 - fruit
 - meat and vegetables or poultry and vegetables
 - dairy
- preparing the following three types of fillings:
 - cold fruit filling
 - hot meat and vegetables or hot poultry and vegetables filling
 - hot custard filling
- checking condition of ingredients used, including:
 - any indicators of food spoilage
 - quality
 - use-by date
 - damaged packaging
- using the following nine items of food preparation equipment:
 - knife sharpening steels or stones
 - cook's knife
 - paring knife
 - scales
 - peelers, corers or slicers
 - thermometers
 - whisks: fine or coarse stainless steel wire
 - cutting boards

- cooking pots
- preparing and cutting fruits and vegetables
- using the following three cooking activities:
 - boiling
 - shallow frying (pan-fry, sauté or stir-fry)
 - microwaving.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to using food preparation equipment to prepare fillings
- food safety conditions applicable to using food preparation equipment to prepare fillings
- types and storage requirements of ingredients, including:
 - fruit and vegetables
 - dairy products
 - meat and poultry
 - custard
- cookery methods, including:
 - boiling
 - shallow frying, including pan-fry, sauté or stir-fry
 - microwaving
- meaning and role of mise en place in the process of preparing and cooking fillings
- procedures for storing fillings, including refrigeration, freezing and shelf-life
- techniques for preparing and cutting fruit and vegetables, including:
 - cleaning
 - peeling
 - slicing
 - dicing
- time and temperature requirements for:
 - thawing
 - conditioning
 - reheating
 - cooking
 - cooling of cooked food
- safe use and functions of food preparation equipment, including:
 - knife sharpening steels and stones
 - cook's knife
 - paring knife
 - scales

- peelers, corers and slicers
- thermometers
- fine and coarse stainless steel wire whisks
- cutting boards
- cooking pots
- techniques for measuring ingredients, including:
 - by weight
 - by volume
 - by count
 - by estimation
- typical cooking parameters, including:
 - cooking temperatures
 - cooking times
- required characteristics of fillings, including:
 - texture
 - consistency
 - flavour
- typical filling preparation faults, including:
 - undercooked and overcooked
 - incorrect ingredients
 - incorrect ingredient quantities
- contamination and cross-contamination risks associated with ingredients and processes
- techniques for cleaning equipment for food preparation
- techniques for cleaning the work area used for food preparation
- techniques for disposing of waste from food preparation
- filling and filling preparation terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - refrigeration unit with shelving
 - storage facilities
 - microwave
 - hot plates or cook tops
 - knife sharpening steels and stones
 - cook's knife

- paring knife
- scales
- peelers, corers or slicers
- thermometers
- whisks: fine or coarse stainless steel wire
- cutting boards
- cooking pots
- cleaning cloths
- dustpans and brooms
- garbage bins and bags
- hand towel dispenser and hand towels
- mops and buckets
- separate hand basin for hand washing
- sponges, brushes and scourers
- tea towels
- commercial cleaning and sanitising agents and suitable chemicals for cleaning bakeries, equipment and food storage areas
- personal protective equipment (PPE)
- ingredients that meet filling types required in the performance evidence
- specifications:
 - supervisor instructions
 - recipes that meet filling types required in the performance evidence
 - end-product specifications to meet filling types required in the performance evidence
- relationships (internal and/or external):
 - workplace supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK2003 Assist sponge cake production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to assist in the production of sponge cake products in a food preparation environment.

The unit applies to individuals who undertake routine work, including identifying and solving predictable problems under supervision.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm work requirements for sponge cake production with supervisor 1.2 Identify and report work health and safety hazards to supervisor 1.3 Select and wear personal protective equipment according to safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.4 Check work area and personal hygiene meet food safe conditions 1.5 Select equipment and check readiness for use 1.6 Select ingredients and check quality and quantity 1.7 Prepare tins and trays for use
2. Prepare batters	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load, operate and monitor equipment to mix sponge batters 2.3 Check sponge batters to identify routine batter faults, and report to supervisor
3. Bake sponge cake products	3.1 Confirm baking readiness and baking settings with supervisor 3.2 Deposit batters into tins or trays, and set oven temperature to prepare for baking 3.3 Load oven and monitor baking to achieve even bake 3.4 Unload and cool products to meet product type 3.5 Check baked products to identify routine baked sponge cake product faults, and report to supervisor
4. Decorate sponge cake products	4.1 Confirm decorating requirements with supervisor 4.2 Assemble decorating ingredients and equipment, and prepare for use 4.3 Apply decorating materials to meet decorating requirements 4.4 Check decorated products to identify routine decorating problems, and report to supervisor
5. Complete work	5.1 Clean equipment and work area to meet food safe conditions 5.2 Dispose of waste according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipe specifications, ingredient labels and end-product specifications
Numeracy	- Identifies and comprehends measurements, including ingredient quantities in recipe specifications, dates on ingredient labels, mixing times and speeds, baking temperatures and times, and end-product dimensions - Estimates approximate quantities, and uses equipment to measure weights, volumes and dimensions - Uses understanding of three-dimensional shapes to check sponge cake product shapes
Oral communication	Uses listening and questioning techniques to communicate and obtain specific information and confirm understanding
Navigate the world of work	Follows explicit procedures immediately relevant to own role
Interact with others	Follows clearly defined instructions, seeking assistance when necessary
Get the work done	- With assistance, sequences and implements the steps involved in assisting sponge cake production - Uses digital technologies to set process parameters

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK2003 Assist sponge cake production	FDFRB2005A Assist cake, pastry and biscuit production	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK2003 Assist sponge cake production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has assisted sponge cake production, including:

- assisting production of the following four types of sponge cake products:
 - simple decorated sponge
 - sponge roll
 - individual portioned sponge product
 - cupcake
- mixing a premix sponge batter
- using the following two processes:
 - piping
 - hand depositing
- baking using sponge tins and baking trays
- testing the bake of sponges using the following two techniques:
 - skewer testing
 - physical pressing for baked quality
- applying the following five decorating techniques to sponges:
 - dipping
 - dusting
 - creaming
 - icing
 - jamming.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to assisting in cake production
- food safe conditions applicable to assisting sponge cake production
- types and storage requirements of ingredients, including:
 - premixes
 - eggs
 - sugar
- types of ingredient checks, including:
 - type
 - quantity
 - use-by date
 - damaged packaging
- types and purpose of cake production processes, including:
 - mixing sponge ingredients
 - hand depositing sponge batters
 - piping sponge batters
 - baking basic sponges
- techniques for preparing sponge tins and trays, including:
 - greasing
 - papering
- techniques for measuring ingredient quantities, including:
 - by weight
 - by volume
 - by count
 - by estimation
- typical baking parameters, including oven temperatures
- required characteristics of baked sponge products, including:
 - baked aeration
 - baked colour
- purpose and techniques for cleaning equipment, including:
 - round sponge tins
 - baking trays
 - small sponge tins or cupcake tins
- decorating techniques, including:
 - dipping
 - dusting
 - creaming
 - icing
 - jamming
- techniques for testing the bake, including:

- skewer testing
- physical pressing for baked quality
- techniques for cleaning the work area for cake production
- techniques for disposing of waste from cake production
- sponge cake product and process terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a food preparation environment
- resources, equipment and materials:
 - personal protective equipment
 - sink and wash area
 - mixing equipment
 - baking trays and sponge tins
 - small sponge tins or cupcake tins
 - electronic or analogue scales
 - oven suitable to bake the sponge cakes specified in the performance evidence
 - ingredients to create the sponge cake products specified in the performance evidence
- specifications:
 - supervisor instructions
 - a schedule to support the production of basic cake, including product quality, sponge cake scheduling, recipes to suit output and batter requirements, sequence and mixing processes for sponge mixes, and baking parameters for sponge cake production
- relationships (internal and/or external):
 - supervisor
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK2004 Assist basic bread production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to assist in the production of basic bread products in a food preparation environment.

The unit applies to individuals who undertake routine work, including identifying and solving predictable problems under supervision.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm work requirements for bread production with supervisor 1.2 Identify and report work health and safety hazards to supervisor 1.3 Select and wear personal protective equipment according to safety

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.4 Check work area and personal hygiene meet food safe conditions 1.5 Select equipment and check readiness for use 1.6 Select ingredients and check quality and quantity 1.7 Prepare trays and pans for use
2. Prepare bread dough	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into mixer in required ingredient placement 2.3 Operate and monitor mixer to mix dough 2.4 Divide, scale, mould and rest dough to meet required dough size and shape 2.5 Final mould dough and load onto trays and pans 2.6 Prove dough ready for baking 2.7 Check dough to identify routine dough faults, and report to supervisor
3. Bake dough	3.1 Confirm dough readiness and baking settings with supervisor 3.2 Set and warm oven to prepare for baking 3.3 Load oven and monitor baking to achieve even bake 3.4 Unload and cool baked products to meet product type 3.5 Check baked products to identify routine basic bread product faults, and report to supervisor 3.6 Transfer basic bread products for presentation and storage in food safe conditions
4. Complete work	4.1 Clean equipment and work area to meet food safe conditions 4.2 Dispose of waste according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipe specifications, ingredient labels and end-product specifications
Numeracy	- Identifies and interprets numerical information, including ingredient quantities in recipe specifications, dates on product labels, mixing times and speeds, baking temperatures and times, and finished product dimensions - Estimates approximate quantities, and uses equipment to measure weights, volumes and dimensions - Divides dough into equal portions by estimated weight - Uses understanding of three-dimensional shapes to mould and check basic bread product shapes
Oral communication	Uses listening and questioning techniques to communicate and obtain specific information and confirm understanding
Navigate the world of work	Follows explicit procedures immediately relevant to own role
Interact with others	Follows clearly defined instructions, seeking assistance when necessary
Get the work done	- With assistance, sequences and implements the steps involved in assisting basic bread production - Uses digital technologies to set process parameters

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK2004 Assist basic bread production	FDFRB2004A Provide assistance for bread products	Updated to meet Standards for Training Packages Minor changes to elements and performance criteria to increase clarity	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK2004 Assist basic bread production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has assisted in the production of white bread products, including:

- preparing and mixing the following two dough types:
 - premix dough
 - instant dough/no time dough/scratch mix dough
- producing the following five bread product types:
 - round bread roll variety
 - long bread roll variety
 - bread loaf variety
 - basic plaited bread
 - savoury bread variety
- applying the following three techniques for moulding dough:
 - rounding
 - batons
 - plaiting
- baking basic bread using the following bread baking equipment:
 - bread tins
 - bread baking trays
- applying the following three finishing techniques:
 - pre-prove scoring
 - seeding
 - dusting.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to assisting basic bread production
- food safe conditions applicable to assisting basic bread production
- types and storage requirements of ingredients, including:
 - premixes
 - flour
 - water
 - yeast
- the purpose of basic bread production processes, including:
 - mixing ingredients
 - moulding basic bread
 - proving basic bread
 - baking basic bread
- techniques for measuring ingredient quantities, including:
 - by weight
 - by volume
 - by count
 - by estimation
- techniques for preparing bread tins and trays, including oiling/greasing and paper lining
- typical baking parameters, including oven temperatures
- required characteristics of basic bread products, including:
 - baked colour
 - final shape
- techniques for cleaning the work area for bread production
- techniques for disposing of waste from bread production
- basic bread product and process terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a food preparation environment
- resources, equipment and materials:
 - personal protective equipment
 - sink and wash area
 - mixing equipment
 - electronic or analogue scales

- scrapers
- baking trays and tins
- oven suitable to bake the products specified in the performance evidence
- ingredients that are needed to create the basic bread products specified in the performance evidence
- specifications:
 - supervisor instructions
 - end-product specifications for the basic bread products specified in the performance evidence
 - a production schedule to support the production of basic bread, including product quality, dough scheduling, recipes to suit output and dough requirements, sequence and mixing processes for premix doughs and scratch/no time/instant doughs, and baking parameters for basic breads
- relationships (internal and/or external):
 - supervisor
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK2005 Maintain ingredient stores

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to maintain ingredient stores in a commercial baking environment.

The unit applies to individuals who undertake routine work under supervision. This includes identifying and providing solutions to a limited range of predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Maintain stock quality	1.1 Confirm required stock food safe storage conditions with supervisor 1.2 Check date codes to identify out-of-date stock

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Inspect stock to identify damage and spoilage 1.4 Protect stock from cross-contamination to maximise use 1.5 Check stock to identify stock quality problems for supervisor
2. Maintain perishables quality	2.1 Identify perishables and confirm required food safe storage conditions with supervisor 2.2 Measure, record and check perishables temperatures meet food safe storage conditions 2.3 Rotate perishables to maximise use 2.4 Check perishables to identify stock quality problems for supervisor
3. Maintain stock levels	3.1 Confirm required stock levels with supervisor 3.2 Use safe manual handling techniques to handle ingredient stores 3.3 Check ingredient levels and replenish as needed to maintain required levels 3.4 Clean ingredient storage equipment to meet food safe conditions 3.5 Complete store records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from stock labels
Writing	Completes stores records using required format and language
Numeracy	- Identifies and comprehends measurements, including stock volumes - Interprets safe food condition temperature range requirements for perishables and stores
Oral communication	Uses listening and questioning techniques to communicate and obtain specific information and confirm understanding
Navigate the world of	Follows explicit procedures immediately relevant to own role

Skill	Description
work	
Interact with others	Follows clearly defined instructions, seeking assistance when necessary

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK2005 Maintain ingredient stores	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK2005 Maintain ingredient stores

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has maintained ingredient stores, including:

- maintaining the following six types of bakery stock:
 - dairy ingredients
 - frozen ingredients
 - tinned ingredients
 - raw ingredients
 - refrigerated goods
 - dry goods
- checking stock temperatures and storage temperatures for perishables
- undertaking rotation of stock
- identifying and reporting out-of-date stock during the rotation of stock
- cleaning the following six types of storage equipment:
 - dry storage tubs or bins
 - dry storage area
 - frozen storage area
 - small plastic containers with lids
 - refrigerated storage area
 - spray bottles.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including safe manual handling techniques, applicable to maintaining ingredient stores
- food safety conditions applicable to maintaining ingredient stores
- types, safe handling and storage requirements of bakery stock, including:
 - dairy ingredients
 - frozen ingredients
 - tinned ingredients
 - raw ingredients
 - refrigerated goods
 - dry goods
- types of ingredient containers and signs of damage and spoilage, including:
 - dry storage tubs and bins
 - small plastic containers
 - dry storage bags
 - refrigerated storage
 - canned goods
 - sealed bags
 - perishable items
 - spray bottles
- techniques for protecting ingredients from cross-contamination
- types of ingredient quality checks, including:
 - type
 - quantity
 - use-by date
 - damaged packaging
 - odour
 - colour
- stock rotation methods
- techniques for measuring and recording temperatures of:
 - perishables
 - frozen goods storage
 - refrigerated goods storage
 - dry goods storage
- techniques for checking date codes
- techniques for disposing of waste stock
- bakery stores terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - thermometer
 - dry store area
 - temperature recording sheets
 - dry storage tubs or bins
 - small plastic containers with lids
 - dry storage bags
 - refrigerated storage
 - frozen storage
 - spray bottles
 - stock that meets ingredient types specified in the performance evidence
- specifications:
 - supervisor instructions
 - food safe conditions for ingredient stores
- relationships (internal and/or external):
 - supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3001 Produce laminated pastry products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce laminated pastry products using pastry fats in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	volumes 1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select laminated pastry equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Prepare tins and trays to meet work requirements
2. Prepare fillings for laminated pastry products	2.1 Select and handle perishables according to food safety requirements 2.2 Measure laminated pastry filling ingredient quantities to meet recipe specifications and prepare for use 2.3 Prepare fruit as required for product type 2.4 Blend and combine filling ingredients to meet product type 2.5 Check fillings to identify faults and rectify 2.6 Prepare and transfer fillings for storage as required in accordance with food safety requirements
3. Mix laminated pastry dough	3.1 Measure laminated pastry ingredient quantities to meet recipe specifications 3.2 Load ingredients into mixer in required ingredient sequence 3.3 Operate and monitor mixer to mix laminated pastry dough 3.4 Incorporate fat into laminated pastry dough for Scotch method pastry 3.5 Incorporate fat into finished pastry dough for English method pastry 3.6 Fold and laminate pastry dough with number of folds required to meet product type 3.7 Check laminated pastry dough to identify faults and rectify 3.8 Prepare and transfer laminated pastry dough for storage as required in accordance with food safety requirements
4. Form and fill laminated pastry	4.1 Roll laminated pastry to thickness required for product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
products	4.2 Cut, slice and portion pastry as required for product type 4.3 Form pastry in shapes for filling as required for product type 4.4 Add fillings as required for product type 4.5 Load tins and trays to prepare for baking 4.6 Check laminated pastry products to identify faults and rectify
5. Pre-bake finish laminated pastry products	5.1 Prepare pre-bake finishing mediums to meet recipe specification 5.2 Pre-bake finish laminated pastry products to meet product type 5.3 Check pre-bake finished laminated pastry products to identify faults and rectify
6. Bake laminated pastry products	6.1 Set baking temperatures and times to prepare for baking 6.2 Load oven and monitor baking to achieve required bake for product type 6.3 Unload and transfer laminated pastry products to cool 6.4 Check laminated pastry product bake to identify faults and rectify
7. Finish laminated pastry products	7.1 Prepare finishing mediums to meet recipe specifications 7.2 Finish baked laminated pastry products to meet product type 7.3 Check finished laminated pastry products to identify faults and rectify 7.4 Prepare and transfer finished laminated pastry products for presentation and storage in accordance with packaging and food safety requirements
8. Complete work	8.1 Clean equipment and work area to meet housekeeping standards 8.2 Dispose of waste according to workplace requirements 8.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions, and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, temperature and timer settings and product dimensions - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and pastry dimensions - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Laminated pastry equipment must include:	- equipment, including: - mechanical pastry sheeter or pastry break - cool room - equipment accessories, including: - cool room shelving - mechanical pastry sheeter attachments or pastry break attachments

	- tools and utensils, including: • piping bags • pastry cutters • flour brushes • egg wash brushes • rolling pin.
Pastry filling must include:	sweet and savoury thickened and blended fillings.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3001 Produce laminated pastry products	FDFRB2001A Form and fill pastry products	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB2002A Prepare fillings	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3001A Produce pastry	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3007A Bake pastry products	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)	Redesigned unit that includes content from the previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3001 Produce laminated pastry products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced laminated pastry products according to a production schedule, including:

- producing laminated puff or flaky pastry from scratch ingredients using the following two lamination styles and fat incorporation methods:
 - Scotch method
 - English method
- producing the following five laminated pastry products:
 - sweet filled laminated pastry slice
 - vegetable filled product
 - meat filled product
 - cream or custard filled product
 - fruit filled product
- using the following two ratios of fat to flour:
 - 50% half puff
 - 75% three quarter puff
- using the following two folding techniques:
 - three fold
 - book fold
- using the following four finishing techniques:
 - pre-bake finishing
 - post-bake finishing
 - cream finishing
 - icing or fondant finishing
- producing the following four ingredients for filling laminated pastry products:

- meat
- vegetables
- cream or custard
- fruits
- incorporating the following seven processes:
 - folding
 - sheeting
 - laminating
 - filling
 - glazing
 - baking
 - finishing/decorating
- using the following two types of equipment for folding:
 - pastry sheeter or dough break to laminate
 - rolling pin to finish and transfer pastry
- selecting, using and cleaning the pastry cooking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following seven considerations:
 - timings
 - volume requirements
 - product processing requirements
 - filling requirements for laminated pastry
 - finishing requirements for laminated pastry
 - recipe reformulation to minimise waste
 - bake parameters for laminated pastry.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to producing laminated pastry products
- safe use and cleaning of pastry cooking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing laminated pastry products, including temperature control and prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products
- considerations for production scheduling, including:

- timings
- volume requirements
- product processing requirements
- filling requirements for laminated pastry
- recipe reformulation to minimise waste
- finishing requirements for laminated pastry
- bake parameters for laminated pastry
- characteristics and storage requirements of ingredients used in laminated pastry production, including:
 - fats and margarines
 - meat fillings
 - vegetable fillings
 - fruit fillings
 - custard fillings
 - glazes
- mixing methods for laminated pastry, including:
 - Scotch method
 - English method
 - fat ratios and incorporation into laminated pastry
 - development of protein
- methods for folding pastry, including:
 - book fold
 - three fold
 - number of turns
- purpose, techniques and requirements for finishing, including:
 - pre-bake glazing
 - post-bake glazing
 - caramelisation of sugars
 - decorating with creams
- settings for baking for pastry product types, including:
 - oven temperatures
 - baking times
- techniques to identify and rectify causes of shrinkage and its effect on the end product, including:
 - overworking pastry
 - use of too much dusting flour
 - baking too hot
 - not resting pastry prior to processing
 - cause of steam generation in laminated pastry during baking
- techniques for retrieval of scrap, blending with unworked pastry and disposing of waste

- laminated pastry production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - industrial mixer and attachments
 - industrial oven
 - sink and wash area
 - electronic or analogue scales
 - ingredients that meet the laminated pastry product types in the performance evidence
- specifications:
 - recipes that meet the laminated pastry product types required in the performance evidence
 - end-product quality specifications to meet the laminated product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing laminated pastry products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3002 Produce non laminated pastry products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce non laminated pastry products using pastry fats in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select non laminated pastry cooking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Prepare tins and trays to meet work requirements
2. Prepare fillings for non laminated pastry products	2.1 Select and handle perishables according to food safety requirements 2.2 Measure non laminated pastry filling ingredient quantities to meet recipe specification and prepare for use 2.3 Prepare fruit as required for product type 2.4 Blend and combine ingredients to meet product type 2.5 Check fillings to identify faults and rectify 2.6 Store fillings according to food safety requirements
3. Mix non laminated pastry dough	3.1 Measure pastry ingredient quantities to meet recipe specifications 3.2 Load ingredients into mixer in required sequence 3.3 Operate and monitor mixer to mix non laminated pastry dough 3.4 Check non laminated pastry dough to identify faults and rectify 3.5 Prepare and transfer non laminated pastry dough for storage as required in accordance with food safety requirements
4. Form and fill non laminated pastry products	4.1 Roll non laminated pastry to thickness as required for product type 4.2 Cut, slice and portion non laminated pastry as required for product type 4.3 Form non laminated pastry in required shapes for filling as required for product type 4.4 Add fillings as required for product type 4.5 Load tins and trays to prepare for baking 4.6 Check non laminated pastry products to identify faults and rectify
5. Form choux pastry	5.1 Cook fat in liquid to form boiled mass

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
products	5.2 Cook flour in boiled mass to form roux 5.3 Cool roux in preparation for folding in egg 5.4 Fold egg into roux to produce choux pastry 5.5 Pipe choux pastry onto trays ready for baking 5.6 Check pre-bake choux products to identify faults and rectify
6. Pre-bake finish non laminated pastry products	6.1 Prepare pre-bake finishing mediums to meet recipe specification 6.2 Pre-bake finish non laminated pastry products to meet end-product specification 6.3 Check pre-bake finished non laminated pastry products to identify faults and rectify
7. Bake non laminated pastry products	7.1 Set baking temperatures and times to prepare for baking 7.2 Blind bake with blind baking medium as required for product type 7.3 Load oven and monitor baking to achieve even bake and stability for product type 7.4 Unload and transfer non laminated pastry products to cool 7.5 Check non laminated pastry product bake to identify faults and rectify
8. Post-bake finish non laminated pastry products	8.1 Prepare finishing mediums to meet recipe specification 8.2 Melt chocolate in preparation for finishing non laminated pastry products 8.3 Finish baked non laminated pastry products to meet end-product specification 8.4 Check finished non laminated pastry products to identify faults and rectify 8.5 Prepare and transfer non laminated pastry products for presentation and storage in accordance with packaging and food safety requirements
9. Complete work	9.1 Clean equipment and work area to meet housekeeping standards 9.2 Dispose of waste according to workplace requirements 9.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, temperature and timer settings and product dimensions - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes and pastry dimensions - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Non laminated pastry cooking equipment must include:	- equipment, including: - industrial mixer and attachments - freezer

	• industrial cook tops • equipment accessories, including: • dough hook • dough beater • cook pots used to cook fillings • ancillary equipment, including: • pie tins or foils used to bake pastry • tools and utensils, including: • cutting boards • food preparation knives.
Non laminated pastry filling must include:	• sweet thickened or unthickened filling • savoury thickened or unthickened filling.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3002 Produce non laminated pastry products	FDFRB2001A Form and fill pastry products	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB2002A Prepare fillings	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3001A Produce pastry	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3007A Bake pastry products	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)	Redesigned unit that includes content from the previous unit	No equivalent unit

Links

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<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3002 Produce non laminated pastry products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced non laminated pastry products according to a production schedule, including:

- preparing the following three non laminated pastry types from scratch:
 - sweet short pastry
 - savoury short pastry
 - choux pastry
- producing the following five non laminated pastry products:
 - filled sweet non laminated pies or tarts
 - sweet non laminated biscuit product
 - filled savoury non laminated pie or tart product
 - decorated and filled choux pastry
 - sweet non laminated pastry slice
- applying the following four finishes to non laminated pastry products:
 - non laminated product pre-bake finished
 - non laminated product post-bake decorated
 - decorated choux pastry products
 - chocolate finishing
- using the following five fillings:
 - meat filling
 - vegetable filling
 - fruit filling
 - custard filling
 - cream filling

- using the following three mixing methods:
 - crumbing
 - sugar batter method
 - roux
- using the following seven production processes:
 - sheeting or rolling
 - cutting or portioning
 - forming pastry products
 - filling
 - baking
 - blind baking
 - finishing and decorating
- selecting, using and cleaning the pastry cooking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - finishing requirements for non laminated pastry
 - recipe reformulation to minimise waste
 - bake parameters for non laminated pastry.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to producing non laminated pastry products
- safe use and cleaning of pastry cooking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing non laminated pastry products, including temperature control and prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - finishing requirements for non laminated pastry

- recipe reformulation to minimise waste
- bake parameters for non laminated pastry
- storage and serving temperatures of finished non laminated products used, including:
 - hot savoury product
 - cold sweet products
 - products that are reheated for service
- characteristics and storage requirements of ingredients used in non laminated pastry production, including:
 - flour
 - fats/margarines for sweet non laminated pastries
 - fats/margarines for savoury non laminated pastries
 - meats
 - vegetables
 - fruits
 - chocolate
 - thickening starches
- types, functions, settings, safety features, safe use and cleaning of pastry cooking equipment listed in the range of conditions, including electrical hazards and risk controls applicable to cleaning
- preparing and storing fillings, including:
 - cold fillings, including the effect of pregeletanised starches
 - meat fillings
 - vegetable fillings
 - custard fillings
- mixing methods for producing non laminated pastry products, including:
 - crumbing
 - sugar batter method
 - choux pastry method
- processes and techniques for producing non laminated pastry products, including:
 - rolling to match pastry product type thickness requirements and rolling faults
 - processing using manual and mechanical pins, breaks and sheeters
 - ratios of fats to flour in sweet and savoury non laminated pastries
 - development of protein during pastry processing
 - forming pastry into foils or tins
 - depositing, filling and piping fillings
 - finishing and decorating
 - cutting, slicing and portioning
 - baking, including blind baking
 - cause of aeration in non laminated pastry during baking

- causes and corrective action for predictable and sometimes unpredictable non laminated pastry production problems, including:
 - temperature and heat in baking
 - shrinkage of pastry
- techniques for retrieval of scrap, blending with virgin and disposing of waste
- non laminated pastry production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - industrial oven
 - electronic or analogue scales
 - pastry foils or tins
 - pastry sheeter or break
 - rolling pins
 - pastry cutters
 - ingredients that meet the non laminated pastry product types required in the performance evidence
- specifications:
 - recipes that meet the non laminated pastry product types required in the performance evidence
 - end-product quality specifications to meet the non laminated pastry product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing non laminated pastry products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3003 Produce specialist pastry products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce specialist pastry products using butter in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select specialist pastry equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Clean and condition fruits to prepare for use 1.8 Prepare tins and trays to meet work requirements
2. Prepare fillings for specialist pastry products	2.1 Select and handle perishables according to food safety requirements 2.2 Measure specialist pastry filling ingredient quantities to meet recipe specification and prepare for use 2.3 Blend and combine filling ingredients to meet product type 2.4 Check fillings to identify faults and rectify 2.5 Store fillings according to food safety requirements
3. Mix specialist pastry dough	3.1 Measure specialist pastry ingredient quantities to meet recipe specifications 3.2 Load ingredients into mixer in required sequence 3.3 Operate and monitor mixer to mix specialist pastry dough 3.4 Incorporate butter into sugar for sweet short pastry sugar batter method 3.5 Incorporate butter into finished mixed dough for English and French method laminated pastry 3.6 Mix extensible pastry dough and rest for processing 3.7 Fold and laminate laminated pastry dough with number of folds required for product type 3.8 Check specialist pastry dough to identify faults and rectify 3.9 Prepare and transfer specialist pastry dough for storage as required in accordance with food safety requirements
4. Form and fill laminated and non laminated pastry	4.1 Roll laminated and non laminated pastry to thickness required for product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
products	4.2 Cut, slice and portion specialist pastry as required for product type 4.3 Stretch extensible dough for filling as required for product type 4.4 Add fillings as required for product type 4.5 Load tins and trays to prepare for baking 4.6 Check pre-bake formed and filled specialist pastry products to identify faults and rectify
5. Pre-bake finish non laminated pastry products	5.1 Prepare pre-bake finishing mediums to meet recipe specifications 5.2 Pre-bake finish specialist pastry products to meet end-product specification 5.3 Check pre-bake finished specialist pastry products to identify faults and rectify
6. Bake specialist pastry products	6.1 Set baking temperatures and times to prepare for baking 6.2 Blind bake specialist pastry with blind baking medium as required for product type 6.3 Load oven and monitor baking to achieve bake and stability required for product type 6.4 Unload and transfer specialist pastry products to cool 6.5 Check specialist pastry product bake to identify faults and rectify
7. Post-bake fill and finish specialist pastry products	7.1 Prepare post-bake fillings and finishing mediums to meet recipe specifications 7.2 Finish baked specialist pastry products to meet end-product specifications 7.3 Fill baked specialist pastry products to meet end-product specifications 7.4 Check finished specialist pastry products to identify faults and rectify 7.5 Prepare and transfer specialist pastry products for presentation and storage in accordance with packaging and food safety requirements
8. Complete work	8.1 Clean equipment and work area to meet housekeeping standards 8.2 Dispose of waste according to workplace requirements 8.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions, and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, temperature and timer settings and product dimensions - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes and pastry dimensions - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Specialist pastry equipment must include:	- equipment, including: - microwave

	• refrigerator • pastry sheeter or pastry break • equipment accessories, including: • refrigerator shelving • ancillary equipment, including: • pie tins or foils • hand wash areas • cooling wires used for pastry • trays used for pastry baking • tools and utensils, including: • pastry brushes • measuring jugs • mixing spoons used for cooking • containers used for storing fillings.
Specialist pastry filling must include:	• blended cold filling • unthickened cold filling • thickened cooked filling • unthickened cooked filling.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3003 Produce specialist pastry products	FDFRB2001A Form and fill pastry products	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB2002A Prepare fillings	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3001A Produce pastry	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3007A Bake pastry products	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDFRB3012A Diagnose and	Redesigned unit that includes content from	No equivalent unit

	respond to product and process faults (pastry, cake and cookies)	the previous unit	

Links

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Assessment Requirements for FBPRBK3003 Produce specialist pastry products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced specialist pastry products according to a production schedule, including:

- producing the following five types of specialist pastry products:
 - savoury filled laminated pastries
 - laminated pastry slice
 - filled sweet non laminated pastries
 - decorated non laminated pastry biscuits
 - sweet filled extensible dough
- using the following four specialist pastries made from scratch ingredients using butter or oil:
 - laminated puff or flaky pastry
 - sweet short pastry
 - savoury short pastry
 - extensible pastry dough
- using the following four fillings:
 - savoury filling
 - sweet filling
 - custard filling
 - fresh fruit prepared for filling
- applying finishing and decorating using the following two methods:
 - pre-bake glazing and finishing
 - post-bake finishing and decorating
- using the following three butter incorporation methods:

- English method
- French method
- sugar batter or crumbing method
- using a butter-to-flour laminated pastry ratio of minimum 50% half puff
- using the following nine production processes:
 - folding
 - sheeting
 - laminating
 - glazing
 - finishing and decorating
 - filling
 - baking
 - rolling
 - stretching extensible pastry
- selecting, using and cleaning the pastry cooking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- using the following two types of pastry equipment:
 - pastry sheeter or dough break to laminate
 - rolling pin to roll, finish and transfer pastry
- documenting the production schedule including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - finishing and decorating requirements for specialist pastry products
 - recipe reformulation to minimise waste
 - bake parameters for specialist pastry products.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing specialist pastry products
- safe use and cleaning of pastry cooking equipment listed in the range of conditions, including electrical hazards

- regulatory requirements for food safety applicable to producing specialist pastry products, including temperature control and prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - finishing and decorating requirements for specialist pastry products
 - recipe reformulation to minimise waste
 - bake parameters for specialist pastry products
- characteristics and storage requirements of ingredients used in specialist pastry production, including:
 - pastry flour
 - unsalted butter
 - meat fillings
 - fruit fillings
 - glazes
 - fresh cream
- methods and processes for using butter in specialist pastries, including:
 - English method
 - French method
 - the ratio of butter to flour
 - handling and storage of butter
 - consistency of dough to butter for laminating
 - handling and storage of pastry during processing
 - development of protein and gluten during lamination
- processing and finishing of specialist pastry products, including:
 - folding
 - sheeting
 - laminating
 - clarifying butter
 - stretching extensible pastry dough
 - glazing
 - finishing and decorating
 - filling
 - pre-bake glazing
 - post-bake glazing
- identifying and rectifying factors that affect lift, including:
 - number of turns
 - amount of roll in butter

- heat energy in baking specialist pastry
- baking processes of specialist pastry production, including:
 - oven temperatures
 - baking times
- techniques for calculating yields, adjusting recipes and measuring ingredients
- causes and corrective action for predictable and sometimes unpredictable specialist pastry production problems, including:
 - temperature and heat in baking
 - shrinkage of pastry
- techniques for retrieval of scrap, blending with virgin and disposing of waste
- specialist pastry production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment (PPE)
 - equipment specified in the range of conditions
 - industrial mixer and attachments
 - industrial oven
 - industrial cook tops
 - sink and wash area
 - electronic or analogue scales
 - ingredients that meet the specialist pastry product types required in the performance evidence
- specifications:
 - recipes that meet the specialist pastry product types required in the performance evidence
 - end-product quality specifications to meet the speciality pastry product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing specialist pastry products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3004 Produce meringue products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce meringue products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet production volume 1.3 Confirm work area and work practices meet food safety and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select meringue equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Mix meringue batter	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load meringue ingredients into mixer in required sequence 2.3 Operate and monitor mixer to mix batter for optimum meringue aeration for product type 2.4 Fold in ingredients as required to meet meringue product type 2.5 Check meringue to identify batter faults and rectify
3. Process meringue products	3.1 Deposit, spread and pipe meringue batter to prepare gateaux and desserts as required for product type 3.2 Fold meringue batter through gateaux, dessert fillings and bases as required for product type 3.3 Use sight and feel to assess meringue quality 3.4 Check processed meringue to identify faults and rectify
4. Bake meringue products	4.1 Deposit, spread and pipe batters into tins and trays as required for product type 4.2 Set baking temperatures and times to suit meringue product type and size 4.3 Load oven and monitor baking to achieve bake required for meringue product type 4.4 Use sight and feel to assess bake of meringue products 4.5 Unload meringue products to cool 4.6 Check meringue bake to identify faults and rectify
5. Prepare finishing mediums	5.1 Assemble finishing ingredients and equipment and prepare for use 5.2 Measure finishing ingredient quantities to meet recipe specifications 5.3 Operate and monitor mixer to prepare creams and icings as required for product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.4 Prepare chocolate for decorating as required for product type 5.5 Prepare garnishes for decorating as required for product type 5.6 Prepare piping bags to pipe finishing decorations 5.7 Check finishing mediums to identify faults and rectify
6. Finish meringue products	6.1 Finish meringue products to meet product type, and transfer to presentation containers 6.2 Apply creams to finish meringue products as required for product type 6.3 Apply garnishes and decorating finishes to decorate meringue product as required for product type 6.4 Check finished meringue products to identify faults and rectify 6.5 Prepare and transfer products for presentation and storage in accordance with packaging and food safety requirements
7. Complete work	7.1 Clean equipment and work area to meet housekeeping standards 7.2 Dispose of waste according to workplace requirements 7.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels and temperature and timer settings - Estimates approximate quantities and uses equipment to measure ingredient weights and volumes - Performs calculations to adjust recipes using baking formulas, and

Skill	Description
	- allows for wastage • Uses understanding of three-dimensional shapes to shape products and check end-product shapes • Interprets measurement information to set, monitor and adjust process parameters • Completes production records using mathematical symbols and conventions
Navigate the world of work	• Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation • Follows organisational policies and procedures relevant to own work role
Get the work done	• Plans, organises and implements tasks required to achieve production outcomes • Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Meringue equipment must include:	• equipment, including: • industrial mixer and attachments • industrial cook tops • equipment accessories, including: • cake whisk attachment • ancillary equipment, including: • cake hoops or tins • chocolate melting equipment • cook pots • tools and utensils, including: • pallet knives • scrapers • cake knives • piping bags • piping nozzles.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3004 Produce meringue products	FDFRB2003A Produce meringue-based products	Redesigned units with significant changes to elements and performance criteria AQF level changed to reflect the added variety and complexity of the unit's outcomes	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3004 Produce meringue products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced meringue products according to the production schedule, including:

- producing the following three meringue types:
 - French meringue using cold meringue method
 - Swiss meringue using warm meringue method
 - Italian meringue using hot meringue method
- producing the following four meringue-based products:
 - meringue-based gateaux or torte
 - meringue garnish or figurine
 - meringue-based confection
 - meringue-based dessert
- using the following three creams and icings:
 - chocolate ganache
 - chocolate glaze
 - butter cream
- using the following four decorated finishes:
 - fruit decorated
 - cream decorated
 - chocolate decorated
 - scorched meringue
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following six considerations:

- timings
- volume requirements
- product processing requirements
- meringue product finishing requirements for product type
- recipe reformulation to minimise waste
- bake parameters for meringue product type.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to producing meringue products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing meringue products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - meringue product finishing requirements for product type
 - recipe reformulation to minimise waste
 - bake parameters for meringue product type
- characteristics and processes of meringue types, including:
 - French meringue using cold meringue method
 - Swiss meringue using warm meringue method
 - Italian meringue using hot meringue method
- types of meringue-based products, including:
 - meringue-based gateaux and tortes
 - meringue garnish
 - meringue-based confection
 - meringue figurine
 - meringue-based dessert
- using butter creams, ganache and glazes, including:
 - chocolate ganache
 - chocolate glaze
 - butter cream

- types, functions and characteristics of ingredients used in meringue products production, including:
 - reaction of fat against protein in meringue
 - eggs
 - sugar
- processes for producing meringue products, including:
 - mixing physically aerated
 - piping meringue
 - baking
 - whisking
 - boiling
 - scorching
 - drying
- requirements for finishing, including:
 - decorating mediums to suit finishing
 - preparing ganache and glazes
 - melting chocolate
 - using meringue for garnishes
- purpose and functions of production settings, including:
 - oven temperatures for meringue batter type and volume
 - baking times for meringue batter type and volume
- techniques for testing bake of meringue by feel and sight
- required characteristics of meringue products, including:
 - softness
 - firmness
 - sweetness
 - stability
- causes and corrective action for predictable and sometimes unpredictable meringue production problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients
- meringue product terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:

- personal protective equipment
- equipment specified in the range of conditions
- industrial oven
- trays
- ingredients that meet the meringue product types required in the performance evidence
- specifications:
 - recipes that meet the meringue product types required in the performance evidence
 - end-product quality specifications to meet the meringue product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing meringue products
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3005 Produce basic bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce basic bread products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select basic bread baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Mix basic bread dough	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into the mixer in the required ingredient placement 2.3 Operate and monitor mixer to achieve basic bread dough development for product type 2.4 Check mixed basic dough to identify faults and rectify
3. Process basic bread dough	3.1 Divide, scale, mould and intermediate prove basic dough to meet required end-product shape and baked weight 3.2 Final mould basic dough and place on baking surfaces and pre-prove score for product type before final prove 3.3 Retard basic dough as required for product type 3.4 Final prove basic dough as required for product type 3.5 Check processed basic dough to identify faults and rectify
4. Pre-bake finish basic bread products	4.1 Prepare finishing ingredients to meet recipe specifications 4.2 Pre-bake finish basic bread products to meet end-product specifications 4.3 Check pre-bake finished basic bread products to identify faults and rectify
5. Bake basic bread products	5.1 Set baking temperatures and times to prepare for baking 5.2 Visually check basic dough size to confirm readiness for baking, and post-prove score for product type prior to baking 5.3 Load oven and steam as required for product type 5.4 Monitor baking to achieve baked colour and stability required for basic bread product type 5.5 Unload and de-pan baked basic bread products to cool

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.6 Check basic bread product bake to identify faults and rectify 5.7 Prepare and transfer products for presentation and storage in accordance with packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and water and dough temperatures - Divides dough into equal portions by estimated weight - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking environment - Follows organisational policies and procedures relevant to own

Skill	Description
	work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Basic bread baking equipment must include:	- equipment, including: - industrial oven - industrial mixer and attachments - industrial dough moulding equipment - equipment accessories, including: - industrial dough moulding equipment accessories - ancillary equipment, including: - dry ingredients storage containers - industrial baking tins and lids - bread baking trays - ingredient storage bins - tools and utensils, including: - dough knives - dough scrapers - water spray bottles - scoring knives - flour sieves.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3005 Produce basic	FDFRB3002A Produce bread	Redesigned unit that includes content from	No equivalent unit

bread products	dough	previous unit	
	FDFRB3005A Bake bread	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3009A Retard dough	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3010A Process dough	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3011A Diagnose and respond to product and process faults (bread)	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3005 Produce basic bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced basic bread products according to a production schedule, including:

- mixing and using the following three dough types:
 - premix dough
 - instant dough/no time dough/scratch mix dough
 - chemical leavened dough
- producing the following two basic bread types:
 - white bread
 - brown bread
- producing the following six bread product varieties and shapes:
 - condensed/sandwich loaves
 - high top loaves, either married or single
 - soft/enriched bread roll variety
 - crusty/lean bread roll variety
 - crusty/lean loaf – plaited, Vienna, French stick or cob
 - chemical leavened dough
- retarding one of the following three product types produced:
 - soft/enriched bread roll variety
 - crusty/lean bread roll variety
 - crusty/lean loaf – plaited, Vienna, French stick or cob
- selecting and using tins and trays appropriate for dough piece scale weight, volume and size
- using the following eight moulding techniques:

- rounding
- batons
- knots
- 4 piecing
- degassing
- curling/rolling
- sealing
- cutting/portioning
- using the following four bread dough finishing techniques:
 - pre-prove scoring
 - post-prove scoring
 - seeding
 - dusting
- using the following five baking techniques:
 - steaming
 - testing bake by sight and baked colour
 - de-panning basic breads
 - cooling basic bread products on cooling wires
 - using lids to condense loaves
- selecting, using and cleaning the bread baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing parameters for basic bread products
 - bake parameters for basic bread products

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing basic bread products
- safe use and cleaning of bread baking equipment listed in the range of conditions, including electrical hazards

- regulatory requirements applicable to producing basic bread products
- techniques and considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing parameters for basic bread products
 - bake parameters for basic bread products
- functions and characteristics of ingredients used in basic bread production, including:
 - premixes
 - baker's or strong flour
 - whole meal flour
 - baking powder
 - salt
 - sugar
 - yeast, including principles of fermentation
 - water
 - shortening, fats and oils
 - bread improvers
- mixing processes and gluten development for basic bread doughs, including:
 - premix doughs
 - scratch/no time/instant doughs
 - chemical leavened doughs
- sequencing of the rapid or no time basic bread production processes
- purpose and techniques for pre-bake finishing basic breads
- characteristics and techniques for moulding basic bread doughs
- impacts of factors on production of different retarded basic bread products, including:
 - finished dough temperature (FDT)
 - dough size
 - dough shape
 - yeast activity
 - processing retard in cool phase
 - processing retard in warm phase
- techniques for calculating yields, adjusting recipes, converting units of measurement and measuring ingredients
- techniques for selecting tins and trays appropriate for dough piece scale weight, volume and size
- required baked characteristics of basic bread products, including:
 - volume
 - grain

- texture
- crumb colour
- crust formation
- crust colour
- the effects of common bread faults in basic bread production, including:
 - lack of salt
 - too much salt
 - no improver
 - too much improver
 - no yeast
 - too much yeast
 - weak flour instead of strong flour
- techniques for disposing of waste from bread production
- basic bread production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - bread slicer
 - ingredients that meet the basic bread product types required in the performance evidence
- specifications:
 - recipes that meet the basic bread product types required in the performance evidence
 - end-product quality specifications to meet the basic bread product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing basic bread products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3006 Produce savoury bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce savoury bread products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet special dietary

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements and required production volumes 1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select savoury bread baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Prepare savoury fillings	2.1 Select and handle perishables according to food safety requirements 2.2 Measure ingredient quantities to meet recipe specifications and prepare for use 2.3 Blend and combine ingredients to meet savoury product type 2.4 Check savoury filling to identify faults and rectify 2.5 Store savoury fillings according to food safety requirements
3. Mix savoury bread dough	3.1 Measure ingredient quantities to meet recipe specifications 3.2 Load ingredients into mixer in required ingredient placement 3.3 Operate and monitor mixer to achieve savoury dough development for product type 3.4 Add savoury fillings to dough during mixing to meet product type 3.5 Check savoury dough to identify faults and rectify
4. Process savoury bread dough	4.1 Divide, scale, mould and intermediate prove dough to meet required end-product shape and baked weight 4.2 Final mould and shape savoury dough in preparation for applying fillings and toppings 4.3 Retard savoury dough as required for product type 4.4 Final prove savoury dough as required for product type 4.5 Check processed savoury dough to identify faults and rectify
5. Apply toppings and fillings to savoury bread dough	5.1 Select savoury ingredients from storage to meet recipe specifications 5.2 Prepare and apply sauces to savoury doughs according to product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.3 Fill and top savoury doughs as required according to product type 5.4 Identify savoury ingredients for reuse, and store according to food safety requirements 5.5 Check topped and filled savoury bread doughs to identify faults and rectify
6. Bake savoury bread products	6.1 Set baking temperatures and times to prepare for baking 6.2 Visually check dough size to confirm readiness for baking 6.3 Monitor baking to achieve baked colour and stability required for savoury bread product type 6.4 Unload savoury products to cool according to food safety requirements 6.5 Check savoury bread bake to identify faults and rectify 6.6 Prepare and transfer baked savoury products for presentation and storage according to packaging and food safety requirements
7. Steam savoury bread products	7.1 Set steaming settings to prepare for steaming 7.2 Visually check dough size to confirm readiness for steaming 7.3 Load steaming equipment and monitor steaming to achieve steam levels for product type 7.4 Unload steamed products to cool according to food safety requirements 7.5 Check steamed savoury bread product to identify faults and rectify 7.6 Prepare and transfer steamed products for presentation and storage according to packaging and food safety requirements
8. Complete work	8.1 Clean equipment and work area to meet housekeeping standards 8.2 Dispose of waste according to workplace requirements 8.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and water and dough temperatures - Divides dough into equal portions by estimated and scaled weights - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets safe food condition temperature range requirements for perishables - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Savoury bread baking equipment must include:	- equipment, including: - industrial oven - industrial mixer and attachments - industrial cook tops - cool room or refrigeration

	• dish washing sinks • equipment accessories, including: • cool room or refrigerator shelving • dish washing sink taps and attachments • ancillary equipment, including: • pizza trays • cook pots used for preparing savoury fillings • storage containers used for storing savoury fillings • containers used for storing savoury sauces • baking trays and pans used for baking savoury products • cooling wires used for cooling savoury products • cutting boards used for savoury fillings • equipment used to steam savoury bread • tools and utensils, including: • scrapers • ladles and cooking spoons • serrated bread knives • food preparation knives.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3006 Produce savoury bread products	FDFRB3002A Produce bread dough	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3005A Bake bread	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3009A Retard dough	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3010A Process dough	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3011A Diagnose and	Redesigned unit that includes content from	No equivalent unit

	respond to product and process faults (bread)	previous unit	

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3006 Produce savoury bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced savoury bread products according to a production schedule, including:

- producing the following six types of savoury bread products:
 - savoury flat bread
 - savoury bread loaf
 - savoury bread roll
 - savoury filled bread
 - savoury steamed bread
 - savoury unleavened product
- processing one of the above savoury bread products as a retarded product
- meeting one of the following two ingredient-specific special dietary requirements in one of the above savoury bread products:
 - vegetarian
 - vegan
- meeting one of the following four religious special dietary needs in one of the above savoury bread products:
 - Buddhism
 - Hinduism
 - Islam
 - Judaism
- mixing and using the following three types of dough mixes:
 - instant/scratch mix/no time dough
 - bulk ferment dough
 - unleavened dough
- meeting the following two food safety requirements:

- identifying temperature control points of savoury ingredients used
- handling and storing savoury ingredients and products
- preparing and adding the following five types of filling and topping ingredients:
 - dairy products
 - meat products
 - vegetables
 - herbs
 - sauce with a savoury base
- adding the savoury fillings and toppings to savoury bread doughs using the following three methods:
 - incorporating into dough during mixing
 - incorporating on top of savoury dough prior to baking
 - using the savoury filling as a filling inside savoury bread
- selecting, using and cleaning the savoury bread baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- selecting and using tins and trays appropriate for dough piece scale, weight, volume and size
- documenting a production schedule, including the following seven considerations:
 - timings
 - volume requirements
 - savoury filling requirements for product types
 - bake parameters for savoury products
 - product processing requirements
 - storage requirements for savoury products
 - recipe reformulation to minimise waste.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing savoury bread
- safe use and cleaning of bread baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing savoury bread products, including temperature control and prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products

- nature of special dietary requirements suitable for savoury bread products
- nature of religious special dietary needs as they relate to savoury products, including:
 - Buddhism
 - Hinduism
 - Islam
 - Judaism
- nature of ingredient-specific special dietary needs as they relate to savoury products, including:
 - vegetarian
 - vegan
- techniques and considerations for production scheduling, including:
 - timings
 - volume requirements
 - savoury filling requirements for product types
 - bake parameters for savoury products
 - product processing requirements
 - storage requirements for savoury products
 - recipe reformulation to minimise waste
- safe handling, shelf life and storage requirements of ingredients used in savoury bread production, including:
 - savoury sauces
 - meat ingredients
 - dairy ingredients
 - vegetable ingredients
 - herb ingredients
- effects of seasonal changes on dairy products
- storage requirements for:
 - cooked savoury fillings
 - cold savoury fillings
- principles of the production processes, including:
 - preparing fillings
 - mixing, including incorporating savoury ingredients into dough
 - baking toppings
 - rolling dough
 - steaming dough
 - packaging savoury bread
- purpose and principles of the bulk fermentation process
- techniques for retarding savoury bread products, including:
 - retarding savoury bread in the cool phase
 - recovery of retarded savoury bread in the warm phase

- impacts on production of the following:
 - salted ingredients
 - stability of breads using savoury products
- required characteristics of savoury bread products, including:
 - visual appeal
 - flavour
- techniques for disposing of waste from bread production
- savoury bread production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment as specified in the range of conditions
 - rolling pins
 - ingredients that meet the savoury bread product types required in the performance evidence
- specifications:
 - recipes that meet the savoury bread product types required in the performance evidence
 - end-product quality specifications that meet the savoury bread product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing savoury bread products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3007 Produce specialty flour bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce specialty flour bread products in a commercial baking environment. Specialty flour bread products include organic flour breads, non-wheat flour breads, gluten-free breads, rye breads, whole grain flour breads and wholemeal breads.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Calculate yield and adjust recipe to meet special dietary requirements and production volumes 1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select specialty flour bread baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Mix specialty flour bread dough	2.1 Measure ingredient quantities to meet recipe specification 2.2 Load ingredients into mixer in required ingredient placement 2.3 Operate and monitor mixer to achieve speciality flour bread dough development for product type 2.4 Check specialty flour dough to identify faults and rectify
3. Process specialty flour bread dough	3.1 Divide, scale, mould and rest dough to meet required end-product specialty flour product shapes and baked weights 3.2 Final mould dough and place on baking surfaces for final prove as required 3.3 Final prove specialty flour dough as required for product type 3.4 Check processed specialty flour dough to identify faults and rectify
4. Pre-bake finish specialty flour bread products	4.1 Prepare pre-bake finishing mediums to recipe specifications 4.2 Pre-bake finish specialty flour products to meet end-product specifications 4.3 Check pre-bake finished specialty flour products to identify faults and rectify
5. Bake specialty flour bread products	5.1 Set baking temperatures and times to prepare for baking 5.2 Visually check dough size to confirm specialty flour product readiness for baking 5.3 Load oven and steam as required for specialty flour product type 5.4 Monitor baking to achieve baked colour and stability required for speciality flour bread product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.5 Unload and de-pan baked specialty flour products to cool 5.6 Check specialty flour bread product to identify faults and rectify 5.7 Prepare and transfer products for presentation and storage according to packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and water and dough temperatures - Divides dough into equal portions by estimated weight - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own

Skill	Description
	work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Specialty flour bread baking equipment must include:	- equipment, including: - industrial oven - industrial mixer and attachments - dish washing area - equipment accessories, including: - dish washing area taps and accessories - ancillary equipment, including: - specialty flour storage containers - grain soaking containers - dough storage containers - tools and utensils, including: - dusting sieves - scoring knives - spray bottles - thermometers.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3007 Produce specialty flour bread	FDFRB3002A Produce bread dough	Redesigned unit that includes content from previous unit	No equivalent unit

products	FDFRB3005A Bake bread	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3010A Process dough	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3011A Diagnose and respond to product and process faults (bread)	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3007 Produce specialty flour bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced specialty flour bread products according to a production schedule, including:

- producing the following six types of specialty flour bread products:
 - organic breads
 - non-wheat flour breads
 - gluten-free breads
 - rye breads
 - whole grain flour breads
 - wholemeal breads
- mixing and using the following three doughs:
 - scratch mix/no time/instant dough
 - bulk ferment sour doughs
 - all in mix
- using the following five product shapes:
 - baton/Vienna
 - boule/cob
 - loaf
 - rolls
 - specialty shape
- using one of the following five sours for rye bread:
 - lactic sour
 - acetic sour
 - natural sour

- powdered sour
- liquor sour
- incorporating pre-soaked grain into grain bread
- finishing bread using the following four finishing methods:
 - post-prove scoring
 - seeding
 - dusting
 - steaming
- selecting, using and cleaning the bread baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- selecting and using bread shaping equipment, tins and trays appropriate for dough piece scale, weight, volume and size
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for specialty flour products
 - bake parameters for specialty flour products.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing specialty flour bread products
- safe use and cleaning of bread baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food applicable to producing specialty flour bread products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for specialty flour products
 - bake parameters for specialty flour products
- types, characteristics and storage requirements of ingredients used in specialty flour bread production, including:

- organic flour
- non-wheat flour
- rye flour
- gluten-free flour
- grains
- wholemeal flour
- hydration rates for grain breads and wholemeal breads, and purpose and techniques for the soaking of grains
- benefits of organics in flours
- nature of special dietary requirements and gluten intolerance as they relate to dietary-suitable flours and specialty flour bread products
- reformulation of grain and fibre breads
- mixing processes and mixing outcomes for:
 - scratch mix/no time/instant dough
 - bulk ferment sour doughs
 - all in mix
 - specialty flour doughs
 - rye breads
- principles of processing and hearth baking specialty flour breads
- techniques for producing rye breads, including:
 - rye flour varieties for different rye breads
 - using lactic, acetic and natural sour doughs for rye breads
 - using powder and liquor sours for rye breads
 - using baskets for proving when baking rye breads
- processing and baking techniques required for using specialty flours, including:
 - rye breads
 - organic breads
 - non-wheat flour breads
 - gluten-free breads
 - wholemeal flour breads
- impacts on production, including:
 - soaking of grains
 - processing gluten-free flour
- techniques for selecting tins and trays appropriate for dough piece scale weight, volume and size
- causes and corrective action for predictable and sometimes unpredictable specialty flour bread production problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients
- techniques for disposing of waste from bread production

- specialty flour bread production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment as specified in the range of conditions
 - tins
 - trays
 - ingredients that meet the specialty flour bread product types required in the performance evidence
- specifications:
 - recipes that meet the specialty flour bread product types required in the performance evidence
 - end-product quality specifications to meet the specialty flour bread product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing specialty flour bread products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3008 Produce sponge cake products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce and finish sponge cake products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select sponge cake baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Prepare tins, trays and pans to match sponge cake product type
2. Mix sponge cake batter	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into mixer in required ingredient sequence 2.3 Operate and monitor mixer to mix sponge cake batter as required for product type 2.4 Fold in ingredients as required to meet product type 2.5 Check sponge cake batter to identify faults and rectify
3. Bake sponge cake products	3.1 Deposit, spread and pipe sponge cake batters into tins and trays to prepare for baking 3.2 Set baking temperatures and times to meet sponge cake product type and size 3.3 Load oven and monitor baking to achieve baked colour and quality for product type 3.4 Use sight and feel to assess bake of sponge cake products 3.5 Unload and de-pan baked sponge products to cool 3.6 Check sponge cake product bake to identify faults and rectify
4. Prepare finishing mediums	4.1 Assemble finishing ingredients and equipment and prepare for use 4.2 Measure finishing ingredient quantities to meet recipe specifications 4.3 Operate and monitor mixer to prepare creams and icings as required for product type 4.4 Melt and prepare chocolate for decorating as required for product type 4.5 Prepare jams for decorating and filling as required for product type 4.6 Prepare garnishes for decorating as required for product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.7 Prepare paper piping bags to decorate with chocolate 4.8 Prepare piping bags to pipe finishing decorations 4.9 Check finishing mediums to identify faults and rectify
5. Finish sponge cake products	5.1 Cut sponge cake product into portions as required for product type 5.2 Split and fill sponge products as required for product type, and transfer to cake boards as required for product type 5.3 Apply creams and icings to mask and finish sponge cake products as required for product type 5.4 Apply garnishes and decorations to decorate sponge products as required for product type 5.5 Apply simple written inscriptions to decorate sponge products as required for product type 5.6 Check sponge cake product finishing to identify faults and rectify 5.7 Prepare and transfer products for presentation and storage according to packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature and timer settings - Estimates approximate quantities, and uses equipment to measure

Skill	Description
	- ingredient weights and volumes - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Sponge cake baking equipment must include:	- equipment, including: - industrial oven - hand washing sinks - industrial mixer and attachments - equipment accessories, including: - cake whisk - sink taps and accessories - industrial oven decks and accessories - ancillary equipment, including: - sponge baking trays - sponge tins - cupcake tins - ingredient storage containers - tools and utensils, including: - pallet knives

	• piping bags • piping nozzles • plastic scrapers • icing sieves • measuring jugs • mixing bowls.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3008 Produce sponge cake products	FDFRB3003A Produce sponge, cake and cookie batter	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3004A Decorate cakes and cookies	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3006A Bake sponges, cakes and cookies	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3008 Produce sponge cake products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced sponge cake products according to a production schedule, including:

- producing the following four types of sponge products:
 - decorated sponge cake (round or square), minimum 7-inch or 18-centimetre diameter in size
 - sponge roll
 - individual portioned sponge product
 - sponge layer cake
- mixing and using the following two sponge cake batters:
 - mixing scratch mix sponge with or without emulsifier
 - mixing premix sponge
- incorporating the following four sponge cake processing techniques:
 - spreading
 - rolling
 - layering
 - depositing
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- finishing and decorating using the following four methods:
 - masking and combing
 - splitting and filling
 - applying piped finishes with cream or icing
 - garnishing
- adding the following two creams and icings:

- fresh cream or imitation cream
- icing or basic butter cream
- applying two of the following four piped finishing types:
 - rosettes
 - scrolls
 - rope
 - swirls
- preparing and using the following three chocolate decorations:
 - writing simple celebration inscription
 - chocolate shavings
 - chocolate filigrees
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for sponge cake products
 - bake parameters for sponge cake products.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing sponge products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing sponge cake products
- techniques and considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for sponge cake products
 - bake parameters for sponge cake products
- characteristics and storage requirements of ingredients used in sponge products production, including:

- sponge premixes
- eggs
- sugar
- cake fats and shortenings
- cake flour
- sponge emulsifiers
- colouring and flavouring additives
- fresh cream
- imitation cream
- compound chocolate
- jams, conserves and spreads
- determining the correct quantity of colourings and flavourings to match sponge batter size
- selecting and preparing tins and trays to match sponge cake types, including:
 - greasing
 - spraying
 - papering
- recipe formulations for sponge cake, including:
 - genoise
 - traditional
 - premix
 - emulsified
- processes required for producing sponge cake batters, including:
 - mixing, including combination aerated and physically aerated
 - depositing
 - baking, including time and temperatures for sponge batter type and volume
 - de-panning without damage
 - cooling
 - packaging
- preparation and applications of finishes, including:
 - aerating fresh creams
 - mixing icings
 - masking and combing sponges
 - piping decorations
 - melting compound chocolate
 - piping simple inscriptions for special occasion decorating
 - splitting and filling sponges
- storage requirements for finished sponge cake products
- techniques for testing bake of sponge by feel and sight
- causes and corrective action for predictable and sometimes unpredictable sponge cake production problems, including:

- machinery failure
- environmental factors, including heat, humidity and cold
- poor quality ingredients
- techniques for disposing of waste
- sponge products production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - ingredients that meet the sponge cake product types required in the performance evidence
- specifications:
 - recipes that meet the sponge cake products product types required in the performance evidence
 - end-product quality specifications that meet the sponge cake product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing sponge cake products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3009 Produce biscuit and cookie products

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce and finish biscuit and cookie products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

Food safety legislation applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users are advised to check with their food safety authority for specific requirements.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required product volumes 1.3 Confirm work area and work practices meet food safety and

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select biscuit and cookie baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Prepare baking trays to match biscuit and cookie type
2. Mix biscuit and cookie batters and doughs	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into mixer and cook pots in required sequence as required for product type 2.3 Operate mixer and monitor mixing in mixers and cook pots to mix biscuit and cookie batters and doughs 2.4 Fold in ingredients as required to meet product type 2.5 Check biscuit and cookie batters and doughs to identify batter faults and rectify 2.6 Store biscuit and cookie batters and doughs according to food safety requirements
3. Bake biscuit and cookie products	3.1 Deposit, portion and cut biscuit and cookie batters and doughs to trays to meet product type 3.2 Pre-bake finish cookies and biscuits as required to meet product type 3.3 Set baking temperatures and times to prepare for baking 3.4 Load oven and monitor to achieve correct bake and stability for biscuit and cookie product type 3.5 Use sight and feel to assess bake of biscuit and cookie products 3.6 Unload baked biscuit and cookie products to cool 3.7 Check biscuit and cookie bake to identify faults and rectify
4. Prepare finishing mediums	4.1 Assemble finishing ingredients and equipment and prepare for use 4.2 Measure finishing ingredient quantities to meet recipe specifications 4.3 Operate and monitor mixer to prepare creams and icings as required for product type 4.4 Melt and prepare chocolate for decorating as required for product

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	type 4.5 Prepare jams for decorating as required for product type 4.6 Prepare garnishes for decorating as required for product type 4.7 Prepare piping bags to decorate with chocolate and pipe finishing decorations 4.8 Check finishing mediums to identify faults and rectify
5. Finish biscuit and cookie products	5.1 Fill biscuit and cookie products as required for product type 5.2 Apply garnishes and decorating finishes to decorate biscuit and cookie products as required for product type 5.3 Check finished biscuit and cookie products to identify finishing faults and rectify 5.4 Prepare and transfer finished biscuit and cookie products for presentation and storage according to packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions, and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes - Performs calculations to adjust recipes using baking formulas, and

Skill	Description
	- allows for wastage • Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes • Interprets measurement information to set, monitor and adjust process parameters • Completes production records using mathematical symbols and conventions
Navigate the world of work	• Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation • Follows organisational policies and procedures relevant to own work role
Get the work done	• Plans, organises and implements tasks required to achieve production outcomes • Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Biscuit and cookie baking equipment must include:	• equipment, including: • industrial mixer and attachments • industrial cook tops • equipment accessories, including: • whisk attachment • beater attachment • gas or electric hot plates and attachments • dish washing sinks, taps and accessories • cook pots • baking trays • dry ingredient containers • refrigerated ingredient containers • mixing bowls • equipment used to melt chocolate • tools and utensils, including: • hand whisks

	• hand spoons • biscuit and pastry cutters • rolling pins • flour brushes • egg wash brushes • piping bags • piping nozzles.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3009 Produce biscuit and cookie products	FDFRB3003A Produce sponge, cake and cookie batter	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3004A Decorate cakes and cookies	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3006A Bake sponges, cakes and cookies	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3009 Produce biscuit and cookie products

Modification History

Release	Comments
Release 1	This version released with the FBP Food, Beverage and Pharmaceuticals Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced biscuit and cookie products, including:

- producing the following four types of biscuit and cookie products:
 - deposited cookie
 - piped shortbread
 - cut or portioned rolled biscuit
 - moulded and portioned biscuit
- using the following three biscuit and cookie mixing methods:
 - creamed method
 - whisked method
 - melted method
- applying the following nine production processes:
 - piping shortbread
 - depositing
 - conditioning fruit
 - roasting nuts
 - cutting biscuits with cutters
 - rolling biscuit dough
 - moulding biscuit dough
 - portioning biscuit doughs
 - inclusion of glace fruits or nuts into biscuit and cookie doughs
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- applying the following five finishing and decorating methods:
 - using piped decorations

- sandwiching
- dusting
- dipping
- applying glazes or icings
- using the following three finishing ingredients:
 - fondant icing
 - melted chocolate
 - icing sugar
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for biscuit and cookie product types
 - bake parameters of biscuit and cookie product types.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing biscuit and cookie products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing biscuit and cookie products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for biscuit and cookie product types
 - bake parameters of biscuit and cookie product types
- characteristics and storage requirements of ingredients used in biscuit and cookie products production, including:
 - flour suitable for biscuits and cookies
 - preparation of nuts and nut allergies

- compound chocolate
- glace fruits
- preparing and using finishes, including:
 - glace fruit
 - chocolate, including melting properties
 - nuts, including roasting
 - jams
 - fondant heating
 - dipping
 - sandwiching
- processes and techniques for producing biscuit and cookie products, including:
 - hand depositing
 - piping batter in shapes
 - cutting dough
 - moulding dough
 - baking
 - storing, including refrigerating and freezing
 - packaging
- techniques for preparing tins and trays to match biscuit and cookie types, including:
 - spraying
 - papering
- mixing processes for:
 - creamed method
 - whisked method
- shelf life of biscuit and cookie products
- purpose and functions of baking settings, including:
 - oven temperatures
 - baking times
- techniques for testing bake of biscuit and cookie by feel and sight
- required characteristics of biscuit and cookie products, including:
 - crumb structure
 - dryness of biscuit
 - softness of cookie
- causes and corrective action for predictable and sometimes unpredictable biscuit and cookie production problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients
- techniques for disposing of waste from biscuit and cookie production
- biscuit and cookie products production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - equipment specified in the range of conditions
 - industrial oven
 - personal protective equipment
 - ingredients that meet the biscuit and cookie product types required in the performance evidence
- specifications:
 - recipes that meet the biscuit and cookie product types required in the performance evidence
 - end-product quality specifications that meet the biscuit and cookie product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing biscuit and cookie products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3010 Produce cake and pudding products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce and finish cake and pudding products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	volume 1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select cake and pudding baking and steaming equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Clean and condition dried fruits to prepare for use 1.8 Prepare tins, trays and pans to match cake and pudding types
2. Mix cake and pudding batter	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into mixer in required sequence 2.3 Operate and monitor mixer to mix batter 2.4 Fold in ingredients as required to meet cake and pudding product type 2.5 Check cake and pudding batters to identify faults and rectify
3. Bake and steam cake and pudding products	3.1 Deposit, spread and pipe cake and pudding product batters into tins and trays to prepare for baking 3.2 Set baking and steaming temperatures and times to meet cake and pudding product type and size 3.3 Load ovens and steamers and monitor baking and steaming to achieve even bake and steam of product for product type 3.4 Use sight, feel and skewers to assess bake of cake and pudding products 3.5 Unload and de-pan baked cake products to cool 3.6 Check cake product bake and steam of pudding to identify faults and rectify
4. Prepare finishing mediums	4.1 Assemble finishing ingredients and equipment and prepare for use 4.2 Measure finishing ingredient quantities to meet recipe specification 4.3 Operate and monitor mixer to prepare icings and glazes as required for product type

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.4 Prepare garnishes for decorating as required for product type 4.5 Prepare piping bags to pipe finishing decorations 4.6 Check finishing mediums to identify faults and rectify
5. Finish cake products	5.1 Cut cake products into portions as required for product type 5.2 Apply icings and glazes to mask cake products as required for product type 5.3 Apply garnishes and decorating finishes to decorate cake products as required for product type 5.4 Check finished cake products to identify finishing faults and rectify 5.5 Prepare and transfer products for presentation and storage according to packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to shape and

Skill	Description
	- portion products and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Cake and pudding baking and steaming equipment must include:	- equipment, including: - industrial mixer and attachments - dish washing sinks - cool room or refrigerator - equipment accessories, including: - sink taps and accessories - cool room or refrigerator shelving - ancillary equipment, including: - cake baking trays - cake tins or hoops - cooling wires - equipment used to steam puddings - mixing bowls - tools and utensils, including: - pallet knives - serrated knife - plastic scrapers - sieves

	thermometer.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3010 Produce cake and pudding products	FDFRB3003A Produce sponge, cake and cookie batter	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3004A Decorate cakes and cookies	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3006A Bake sponges, cakes and cookies	Redesigned unit that includes content from previous unit	No equivalent unit
	FDFRB3012A Diagnose and respond to product and process faults (pastry, cakes and cookies)	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3010 Produce cake and pudding products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced basic cake and pudding products according to the production schedule, including:

- producing and decorating the following six cake and pudding product varieties:
 - fruit cake decorated with fondant or plastic icing
 - steamed pudding
 - flavoured bar cake decorated with icing
 - cake slice decorated with icing or glaze
 - flavoured cupcake or muffin
 - special dietary cake
- producing specialty dietary cake to one of the following two dietary requirements:
 - vegan
 - gluten-free
- using the following three cake and pudding mixing methods:
 - all in mixing method
 - mixing sugar batter method
 - mixing flour batter method
- using the following five production processes and techniques:
 - depositing cake and pudding batter
 - steaming of puddings
 - baking of cakes
 - conditioning of dried fruit
 - portioning and slicing of cakes and slices
- using the following two decorating and finishing techniques:
 - covering and garnishing with RTR, fondant or plastic icing

- spreading with icing or glaze
- conditioning of dried fruit for use in batter for one of the following two products:
 - cake
 - pudding
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning.
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - decorating and finishing requirements for cakes
 - recipe reformulation to minimise waste
 - bake and steam parameters of cakes and puddings.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing cake and pudding products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing cake and pudding products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - decorating and finishing requirements for cakes
 - bake and steam parameters of cakes and puddings
- types, functions and storage requirements of ingredients as used in cake and pudding products production, including:
 - eggs
 - sugar
 - cake fats
 - cake flours
 - baking powder

- bicarbonate soda
- dried fruit
- ready to roll (RTR)/fondant/plastic icing
- icings and glazes
- special dietary requirements for cakes, including both vegan and gluten-free
- techniques for preparing tins and trays to match cake and pudding types, including:
 - greasing
 - spraying
 - insulating baking tins and pans to match richness of cakes
- ingredient ratios and mixing processes:
 - fruit cake and puddings
 - pound cake
 - hi-ratio cake
- processes for producing cake and pudding products, including:
 - insulating
 - baking, including radiant and conductive heat
 - steaming and boiling
 - de-panning without damage
 - cooling
 - finishing
 - packaging
- types of finishing mediums, including:
 - icings
 - glazes
 - RTR icing, fondant and plastic icing
- techniques for portioning cakes and cake slices to suit end-product and finishing requirements
- shelf life of cakes and puddings
- techniques for selecting tins and trays appropriate for cake and pudding product size and shape
- purpose and functions of production settings, including:
 - oven temperatures to match richness of cakes
 - baking times to match richness of cakes
 - steaming times and temperatures for pudding batter type and volume
- techniques for testing bake of cakes and puddings by feel, sight and skewer
- causes and corrective action for predictable and sometimes unpredictable cake and pudding production problems, including:
 - machinery failure
 - poor quality ingredients
- techniques for disposing of waste from cake and pudding production
- cake and pudding products production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - industrial oven
 - ingredients that meet the cake and pudding product types required in the performance evidence
- specifications:
 - recipes that meet the cake and pudding product types required in the performance evidence
 - end-product quality specifications that meet the cake and pudding product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing cake and pudding products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3011 Produce frozen dough products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce frozen dough products in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPRBK3005 Produce basic bread products.

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volume

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select frozen and par baked dough baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Mix frozen dough	2.1 Measure ingredient quantities to meet recipe specification 2.2 Load ingredients into mixer in required ingredient placement 2.3 Operate and monitor mixer to achieve frozen dough development for product type 2.4 Check frozen and par baked dough to identify dough faults and rectify
3. Process frozen and par baked doughs	3.1 Divide, scale, mould and intermediate prove frozen and par baked dough to meet required end-product shape and baked weight 3.2 Final mould frozen and par baked dough and place on freezing or baking surfaces 3.3 Laminate and finish frozen and par baked dough as required prior to freezing or par baking 3.4 Check processed frozen and par baked dough to identify faults and rectify 3.5 Package and freeze frozen and par baked dough to meet food safety requirements
4. Par bake bread products	4.1 Final prove par baked dough to prepare for baking 4.2 Set baking temperatures and times to prepare for par baking 4.3 Visually check dough size to confirm readiness for baking 4.4 Load oven and steam as required for product type 4.5 Monitor baking to achieve internal par bake temperature for par bake 4.6 Unload and de-pan par baked product to cool 4.7 Check par baked bread products to identify faults and rectify 4.8 Package and freeze par baked bread product to meet food safety requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Recover frozen doughs and par baked breads	5.1 Transfer frozen doughs and par baked breads from frozen storage to trays and pans, to recover and thaw according to food safety requirements 5.2 Final prove frozen doughs as required for product type 5.3 Check recovered doughs and par baked breads to identify faults and rectify
6. Finish frozen dough products	6.1 Prepare pre-bake finishing mediums to meet recipe specifications 6.2 Prepare simple fillings to meet recipe specifications 6.3 Pre-bake finish frozen and par baked products to meet end-product specifications 6.4 Check pre-bake finished products to identify faults and rectify
7. Bake frozen dough products	7.1 Set baking temperatures and times to prepare for baking 7.2 Visually check frozen dough size to confirm readiness for baking 7.3 Load oven and steam frozen bread as required for product type 7.4 Monitor baking to achieve baked colour and stability required for frozen dough product type 7.5 Unload and de-pan baked products to cool 7.6 Check product bake to identify faults and rectify
8. Finish frozen and par baked dough products	8.1 Prepare post-bake finishing mediums to meet recipe specifications 8.2 Post-bake finish products to meet end-product specifications 8.3 Check post-bake finished products to identify faults and rectify
9. Complete work	9.1 Clean equipment and work area to meet housekeeping standards 9.2 Dispose of waste according to workplace requirements 9.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions, and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and water and dough temperatures - Divides dough into equal portions by estimated weight - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Frozen and par baked dough baking equipment must include:	- equipment, including: - industrial oven - industrial prover - industrial mixer and attachments - pastry sheeter/dough break or rolling pin - freezer

	• equipment accessories, including: • oven baking trays • freezing trays • freezing racks • ancillary equipment, including: • rolling pin • cooling wires • dough and pastry benches • tools and utensils, including: • rolling pins • cake knives • bread knives • processing knives • dough scrapers.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3011 Produce frozen dough products	FDFRB3008A Store, handle and use frozen dough	Supersedes and replaces FDFRB3008A Elements and performance criteria added that include mixing and par baking of frozen dough	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3011 Produce frozen dough products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced frozen dough products according to a production schedule, including:

- producing the following five frozen dough baked products:
 - laminated frozen dough product
 - basic bread frozen dough product
 - sweet yeast bread frozen dough product
 - specialty flour bread frozen dough product
 - chemical leavened frozen dough
- incorporating the following four frozen dough processes:
 - ready-to-prove frozen dough
 - ready-to-bake frozen dough
 - par baked frozen dough
 - finishing frozen dough
- using one of the following two simple fillings:
 - simple sweet filling
 - simple savoury filling
- producing the following four product shapes:
 - baguette
 - round or long roll
 - croissant or danish
 - cut or portioned
- producing the following three product styles:
 - decorated frozen dough

- undecorated frozen dough
- undecorated par baked dough
- finishing the products using the following four techniques:
 - dusting
 - glazing
 - piping
 - scoring
- selecting tins and trays appropriate for dough piece scale weight, volume and size
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following seven considerations:
 - timings for freezing frozen and par baked dough
 - timings for thawing frozen and par baked dough
 - product processing requirements for frozen and par baked dough
 - volume requirements
 - recipe reformulation to minimise waste
 - freezing and thawing times
 - bake parameters for frozen product.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing frozen dough products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing frozen dough products, including temperature control
- techniques and considerations for production scheduling, including:
 - timings for freezing frozen and par baked dough
 - timings for thawing frozen and par baked dough
 - product processing requirements for frozen and par baked dough
 - volume requirements
 - recipe reformulation to minimise waste
 - freezing and thawing times
 - bake parameters for frozen product
- characteristics and storage requirements of frozen dough types, including:

- ready-to-prove frozen dough
- ready-to-bake frozen dough
- par baked frozen dough
- chemically leavened frozen dough
- functions and characteristics for frozen and par baked dough ingredients, including:
 - yeast levels
 - sugar inclusion
 - water and temperature of water
 - effects of salt
- principles and techniques of freezing doughs, including:
 - snap freezing
 - storage stages, including freeze down and recovery
 - maintaining freezer temperatures
 - freezing times for dough types and sizes
 - optimal storage times
 - internal bake temperatures of par baked breads
 - storage patterns for frozen dough, including making efficient use of storage space, stock rotation and minimising temperature fluctuations
- principles of thawing frozen and par baked doughs, including:
 - thawing times for dough types and sizes
 - consequences of slow or fast thawing
 - thawing rate for yeast doughs
- types, functions, safe use, cleaning and freezing capacity of dough freezing equipment, including:
 - conventional freezers
 - blast freezers
- handling requirements for made-up and proved doughs to preserve dough structure
- impacts of factors on production of different frozen dough products, including:
 - finished dough temperature (FDT)
 - dough size
 - dough shape
 - yeast activity
 - processing frozen dough in cool phase
 - processing frozen dough in warm phase
- techniques for calculating yields, adjusting recipes and measuring ingredients
- causes and corrective action for predictable and sometimes unpredictable frozen dough product production problems, including:
 - frozen dough inconsistent temperature
 - frozen dough inconsistent moisture control
 - machinery failure

- environmental factors, including heat, humidity and cold
- poor quality ingredients
- techniques for disposing of waste from frozen dough product production
- frozen dough product production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - ingredients that meet the frozen dough product types required in the performance evidence
- specifications:
 - recipes that meet the frozen dough product types required in the performance evidence
 - end-product quality specifications that meet the product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing frozen dough products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3012 Schedule and produce bread production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to schedule and produce bread production in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan bread production schedule	1.1 Identify bread production targets to meet daily production requirements 1.2 Reformulate master recipes to meet production target

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Estimate process timing and plan process sequence to meet bread production targets 1.4 Document production schedule according to workplace requirements
2. Plan bread production resources and processes	2.1 Identify equipment requirements and check to confirm availability and operational readiness for bread production 2.2 Calculate ingredient quantities required to meet bread production targets 2.3 Confirm availability and quality of ingredient stocks to prepare for bread production
3. Implement bread production	3.1 Implement the production schedule to produce baked products 3.2 Monitor bread production against the production schedule to identify variances, and rectify to ensure bread production targets are met 3.3 Monitor and control food safety risks to meet food safety standards 3.4 Monitor and control workplace health and safety risks to meet workplace health and safety requirements 3.5 Assess baked bread products against required volumes and end-product specifications to identify faults and rectify
4. Complete bread production	4.1 Clean equipment and work area to meet housekeeping standards 4.2 Dispose of waste according to workplace requirements 4.3 Document scheduling adjustments and production outputs according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions, and end-product specifications

Skill	Description
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Performs calculations to establish production targets, adjust recipes using baking formulas, and allow for wastage - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Daily production requirements must include:	- baked bread products - bread production volume - end-product specifications - times for completion for baked bread products.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3012 Schedule and produce bread	FDFRB3016A Plan and schedule production for retail	Redesigned unit that includes content from the previous unit	No equivalent unit

production	bakery	Production of baked items added to the unit	

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3012 Schedule and produce bread production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has scheduled production for and produced 19 bread products over a period of four shifts (Note: The scheduling of production is to be done prior to the production of the bread products), including:

- producing the following five bread product types:
 - condensed/sandwich loaves
 - iced decorated sweet yeast buns
 - savoury bread rolls
 - laminated yeast dough as croissant product
 - whole grain flour breads
- producing 14 of the following 17 bread product types:
 - crusty loaf with no more than 2% enriching agents that is plaited, Vienna, French stick or cob
 - soft/enriched bread roll variety
 - crusty/lean bread roll varieties
 - high top loaves, either married or single
 - fruited sweet yeast product
 - filled sweet yeast product
 - cream decorated sweet yeast bun
 - spiced sweet yeast bun or loaf
 - savoury flat bread
 - savoury steamed bread
 - savoury unleavened product
 - fried basic artisan product as decorated donuts

- sweet laminated yeast dough as danish product
- highly enriched basic artisan product
- wholemeal breads
- gluten-free breads
- rye breads
- using at least two of the following four mixing methods per shift:
 - instant/no time/rapid dough process
 - chemical leavened dough
 - bulk ferment
 - ferment
- monitoring operations and addressing variations to the production schedule, ensuring end-product specifications and production targets are met
- documenting and implementing four daily production schedules, including the following production scheduling considerations:
 - production timings
 - product quality
 - reformulation of recipes to suit products
 - finished dough or batter temperatures
 - mixing, processing, baking and finishing requirements for products
 - special equipment or resources required for production
 - scheduling for each stage of the bakery production process, including labour requirements
 - equipment types
- documenting a production report for each of the four shifts that includes the following considerations:
 - scheduling efficiencies for use of equipment and labour in relation to items produced
 - wastage efficiencies of products produced
 - improvements on the scheduling to meet performance
 - product quantities produced in relation to products scheduled
 - completion times of product
 - product quality outcomes.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements applicable to scheduling and producing bread products

- regulatory requirements for food safety applicable to scheduling and producing bread products, including temperature control and the prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products
- techniques relevant to planning bread production, including:
 - production timings
 - product quality
 - reformulation of recipes to suit products
 - finished dough or batter temperatures
 - mixing, processing, baking and finishing requirements for products
 - special equipment or resources required for production
 - scheduling for each stage of the bakery production process
 - equipment types
- considerations relevant to reporting on production outcomes, including:
 - scheduling efficiencies and whether completion times were met
 - wastage efficiencies of products produced
 - improvements on the scheduling to meet performance
 - product quantities produced in relation to products scheduled
 - completion times of product
 - product quality outcomes
- techniques used to regulate dough maturation and proving, including:
 - formulation
 - temperature control
 - time
- predictable causes of production variation and their likely impact on production targets, including:
 - machine failure
 - product failure
 - calculation errors
 - estimation errors
- production processes for different product ranges, including:
 - use of specific equipment
 - use of specialised ingredients
 - additional preparation requirements
- baking industry terminology relevant to bread production planning.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions

- resources, equipment and materials:
 - personal protective equipment
 - commercial bakery equipment and information on capacity
 - industrial oven
 - industrial mixer and attachments
 - pastry sheeter or dough break
 - refrigeration
 - ingredients to meet the product types required in the performance evidence
- specifications:
 - production schedule template that includes a level of detail that accurately represents workplace conditions
 - recipe specifications for the product types required in the performance evidence
 - formulae to calculate batch weight to finished product weight
 - end-product quality specifications to meet the product types required in the performance evidence
- timeframes:
 - over five shifts that can be continuous or staggered, consisting of one shift for upfront scheduling of production for the bread products specified in the performance evidence, and four daily shifts for the production of the baked products specified in the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3013 Schedule and produce cake and pastry production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to schedule and produce cake and pastry production in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan cake and pastry production schedule	1.1 Establish cake and pastry production targets to meet daily production requirements 1.2 Reformulate master recipes to meet cake and pastry production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	targets 1.3 Estimate process timing and plan process sequence to meet cake and pastry production targets 1.4 Document production schedule according to workplace requirements
2. Plan cake and pastry resources and processes	2.1 Identify cake and pastry equipment requirements, and check to confirm availability and operational readiness for cake and pastry production 2.2 Calculate ingredient quantities required to meet cake and pastry production targets 2.3 Confirm availability and quality of ingredient stocks to prepare for cake and pastry production
3. Implement cake and pastry production	3.1 Implement the production schedule to produce cake and pastry products 3.2 Monitor cake and pastry production against the production schedule to identify variances, and rectify to ensure cake and pastry production targets are met 3.3 Monitor and control food safety risks to meet food safety standards 3.4 Monitor and control workplace health and safety risks to meet workplace health and safety requirements 3.5 Assess cake and pastry products against required volumes and end-product specifications to identify faults and rectify
4. Complete cake and pastry production	4.1 Clean equipment and work area to meet housekeeping standards 4.2 Dispose of waste according to workplace requirements 4.3 Document scheduling adjustments and production outputs according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Performs calculations to establish production targets, adjust recipes using baking formulas and allow for wastage - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Daily production requirements must include:	- cake and pastry products - cake and pastry production volume - end-product specifications - times for completion for cake and pastry products

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3013	FDFRB3016A Plan	Redesigned unit that	No equivalent unit

Schedule and produce cake and pastry production	and schedule production for retail bakery	includes content from the previous unit Production of baked items added to the unit	

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3013 Schedule and produce cake and pastry production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has scheduled production for and produced 15 cake and pastry products over a period of four shifts (Note: The scheduling of production is to be done prior to the production of the cake and pastry products), including:

- producing the following seven cake, pastry and bread product types:
 - laminated yeast dough as croissant product
 - decorated round or square sponge cake that has a minimum diameter of 18 centimetres
 - fruit cake decorated with ready to roll (RTR), fondant or plastic icing
 - deposited cookie
 - cream or custard filled laminated product
 - decorated and filled choux pastry
 - lean basic artisan rolls or loaves with no more than 2% enriching agents
- producing eight of the following 16 cake and pastry product types:
 - fried basic artisan product as decorated donuts
 - highly enriched basic artisan product
 - sponge roll
 - individual portioned sponge product
 - sponge layer cake
 - flavoured bar cake decorated with icing
 - cake slice decorated with icing or glaze
 - flavoured steam pudding
 - moulded and portioned biscuit
 - piped shortbread
 - whisked biscuit or cookie
 - sweet filled pastry slice

- vegetable filled laminated product
- meat filled laminated product
- filled sweet non laminated pies or tarts
- filled savoury non laminated pie or tart product
- mixing, processing, baking and finishing each of the three of the following types of baked products per shift:
 - bread or yeast product
 - cake or sponge
 - cookie or biscuit
 - laminated or non laminated pastry
- monitoring operations and addressing variations to the production schedule, ensuring end-product specifications and cake and pastry production targets are met
- documenting and implementing four daily production schedules, including the following production scheduling considerations:
 - production timings
 - product quality
 - reformulation of recipes to suit products
 - finished dough or batter temperatures
 - mixing, processing, baking and finishing requirements for products
 - special equipment or resources required for production
 - scheduling for each stage of the bakery production process, including labour requirements
 - equipment types
- documenting production reports for each of the four shifts that include the following considerations:
 - scheduling efficiencies for use of equipment and labour in relation to items produced
 - wastage efficiencies of products produced
 - improvements on the scheduling to meet performance
 - product quantities produced in relation to products scheduled
 - completion times of product
 - product quality outcomes.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements applicable to scheduling and producing cake and pastry production

- requirements for food safety applicable to scheduling and producing cake and pastry products, including temperature control and the prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products
- considerations relevant to planning cake and pastry production, including:
 - production timings
 - product quality
 - reformulation of recipes to suit products
 - finished dough or batter temperatures
 - mixing, processing, baking and finishing requirements for products
 - special equipment or resources required for production
 - scheduling for each stage of the bakery production process
 - equipment types
- considerations relevant to reporting on production outcomes, including:
 - scheduling efficiencies, and whether completion times were met
 - wastage efficiencies of products produced
 - improvements on the scheduling to meet performance
 - product quantities produced in relation to products scheduled
 - completion times of product
 - product quality outcomes
- techniques used to regulate dough and batter maturation and proving, including:
 - formulation
 - temperature control
 - time
- predictable causes of production variation and their likely impact on production targets, including:
 - machine failure
 - product failure
 - calculation errors
 - estimation errors
- production processes for different product ranges, including:
 - use of specific equipment
 - use of specialised ingredients
 - additional preparation requirements
- baking industry terminology relevant to production planning.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions

- resources, equipment and materials:
 - personal protective equipment
 - commercial bakery equipment and information on capacity
 - industrial oven
 - industrial mixer and attachments
 - pastry sheeter or dough break
 - refrigeration
 - ingredients to meet the product types required in the performance evidence
- specifications:
 - production schedule template that includes a level of detail that accurately represents workplace conditions
 - recipe specifications for the product types required in the performance evidence
 - formulae to calculate batch weight to finished product weight
 - end-product quality specifications to meet the product types required in the performance evidence
- timeframes:
 - five shifts that can be continuous or staggered, consisting of one shift for upfront scheduling of production for the cake and pasty products specified in the performance evidence, and four daily shifts for the production of the cake and pasty products specified in the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3014 Produce sweet yeast products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce sweet yeast products in a commercial baking environment. Sweet yeast products include enriched breads and fruited enriched breads.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	volumes 1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select sweet yeast baking equipment and check to confirm readiness for use 1.6 Select and prepare ingredients and check to confirm quality and quantity 1.7 Clean and condition fruits to prepare for use 1.8 Prepare sweet fillings as required for product type
2. Mix sweet yeast dough	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into mixer in required placement 2.3 Operate and monitor mixer to achieve sweet yeast dough development for product type 2.4 Check mixed sweet yeast dough to identify faults and rectify
3. Process sweet yeast dough	3.1 Divide, scale, mould and intermediate prove sweet yeast dough to meet end-product shape and baked weight 3.2 Apply sweet fillings to sweet yeast doughs to meet product type 3.3 Final mould sweet yeast dough to meet product requirements, and place on baking surfaces for final prove 3.4 Retard sweet yeast dough as required for product type 3.5 Final prove sweet yeast dough as required for product type 3.6 Check processed sweet yeast dough to identify faults and rectify
4. Bake sweet yeast products	4.1 Set baking temperatures and times to prepare for baking 4.2 Visually check dough size to confirm readiness for baking 4.3 Monitor baking to achieve baked colour and stability required for sweet yeast product type 4.4 Unload and de-pan sweet yeast products to cool 4.5 Glaze products after baking as required for product type 4.6 Check sweet yeast products to identify faults and rectify

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
5. Finish sweet yeast products	5.1 Prepare finishing mediums to meet recipe specifications 5.2 Finish baked products to meet end-product specifications 5.3 Check finished products to identify faults and rectify 5.4 Prepare and transfer products for presentation and storage according to packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and water and dough temperatures - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Divides dough into equal portions by estimated weight - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of	Complies with workplace health and safety and food safety

Skill	Description
work	- regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Sweet yeast baking equipment must include:	- equipment, including: - industrial oven - industrial mixer and attachments - ancillary equipment, including: - dried fruit storage containers - jugs used for storing glazes - dry ingredient storage containers - baking trays used for sweet yeast - cooling wires used for sweet yeast - tools and utensils, including: - icing bags used for decorating - icing nozzles used for decorating - brushes used for glazing products - knives used for decorating and cutting.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3014 Produce sweet yeast products	FDFRB3014A Produce sweet yeast products	Redesigned unit that includes content from previous unit,	Equivalent unit

		excluding frying and laminated products	

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3014 Produce sweet yeast products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced sweet yeast products according to a production schedule, including:

- producing the following five enriched sweet yeast products:
 - filled sweet yeast product
 - fruited sweet yeast product
 - spiced sweet yeast bun or loaf
 - cream decorated sweet yeast bun
 - iced decorated sweet yeast bun
- mixing and using the following three enriched doughs:
 - premix dough
 - instant dough/no time dough/scratch mix dough
 - bulk ferment dough
- using retarding for one of the sweet yeast doughs listed above
- using the following six moulding techniques:
 - rounding
 - batons
 - degassing
 - curling/rolling
 - sealing
 - scrolls
- using the following three finishing and decorating techniques:
 - using cream to decorate sweet yeast product
 - using icing to decorate sweet yeast product

- using fondant to decorate sweet yeast product
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- selecting tins and trays appropriate for dough piece scale, weight, volume and size
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements of sweet yeast products
 - baked parameters of sweet yeast products.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing sweet yeast products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing sweet yeast products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements of sweet yeast products
 - baked parameters of sweet yeast products
- recipe ratios and limits for enriched doughs
- types, functions, characteristics, and storage requirements of ingredients, including:
 - sugars
 - crumb softening agents
 - conditioned fruit
 - cream
 - icing
 - spices
- purpose and techniques for the cleaning, conditioning and use of fruits
- ingredient interactions for sweet yeast products, including:

- yeast and sugar ratios
- reduced salt levels
- reduced water levels
- characteristics of sweet yeast products, including:
 - filled sweet yeast product
 - fruited sweet yeast product
 - spiced sweet yeast bun or loaf
 - decorated sweet yeast product
- mixing processes and gluten development for enriched doughs
- principles of the sweet yeast production processes, including:
 - preparing fillings
 - inclusion of fruit and spices in sweet dough
 - decorating sweet yeast
 - cool phase retarding
 - warm phase retarding
 - baking
 - cooling
 - packaging
- techniques and requirements for finishing sweet yeast products
- impacts on production of different sweet yeast products, including:
 - dough temperature
 - mixing time and gluten development
 - water addition and consistency of dough
 - yeast activity
- techniques for calculating yields, adjusting recipes and measuring ingredients
- techniques for selecting tins and trays appropriate for dough piece scale weight, volume and size
- purpose and functions of sweet yeast settings, including:
 - baking times and temperatures
 - proving humidity and temperature
- required characteristics of sweet yeast products, including:
 - crumb softness
 - shelf life
 - flavour
 - visual appearance
- causes and corrective action for predictable and sometimes unpredictable sweet yeast problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients

- techniques for disposing of waste
- sweet yeast production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - refrigeration
 - mechanical moulding equipment
 - mixing bowls
 - tins
 - ingredients that meet the sweet yeast product types required in the performance evidence
- specifications:
 - recipes that meet the sweet yeast product types required in the performance evidence
 - end-product quality specifications that meet the sweet yeast product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing sweet yeast products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3015 Schedule and produce bakery production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to schedule and produce bakery production in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan production schedule	1.1 Establish production targets to meet daily production requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Reformulate master recipes to meet production targets 1.3 Estimate process timing and plan process sequence to meet production targets 1.4 Document production schedule according to workplace requirements
2. Plan production resources and processes	2.1 Identify equipment requirements, and check to confirm availability and operational readiness for production 2.2 Calculate ingredient quantities required to meet production targets 2.3 Confirm availability and quality of ingredient stocks to prepare for production
3. Implement production	3.1 Implement the production schedule to produce baked products 3.2 Monitor production against the production schedule to identify variances, and rectify to ensure production targets are met 3.3 Monitor and control food safety risks to meet food safety standards 3.4 Monitor and control workplace health and safety risks to meet workplace health and safety requirements 3.5 Assess baked products against required volumes and end-product specifications to identify faults and rectify
4. Complete production	4.1 Clean equipment and work area to meet housekeeping standards 4.2 Dispose of waste according to workplace requirements 4.3 Document scheduling adjustments and production outputs according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications

Skill	Description
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Performs calculations to establish production targets, adjust recipes using baking formulas, and allow for wastage - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Daily production requirements must include:	- baked products, including breads, cakes and pastries - production volume - end-product specifications - times for completion for baked products.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3015 Schedule and produce bakery	FDFRB3016A Plan and schedule production for retail	Redesigned unit that includes content from previous unit	No equivalent unit

production	bakery	Production of baked items added to the unit	

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3015 Schedule and produce bakery production

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has scheduled production for and produced 17 baked products over four shifts (Note: The scheduling of production is to be done prior to the production of the baked items), including:

- producing the following ten baked product types:
 - condensed or sandwich loaves
 - iced decorated sweet yeast bun
 - savoury bread rolls
 - laminated yeast dough as croissant product
 - whole grain flour breads
 - decorated round or square sponge cake that has a minimum diameter of 18 centimetres
 - flavoured bar cake decorated with icing
 - deposited cookie
 - cream or custard filled laminated product
 - decorated and filled choux pastry
- producing seven of the following 12 baked product types:
 - crusty loaf with no more than 2% enriching agents that is plaited, Vienna, French stick or cob
 - soft/enriched bread roll variety
 - crusty/lean bread rolls varieties
 - fruited sweet yeast product
 - savoury flat breads
 - fried basic artisan product as decorated donuts
 - wholemeal breads
 - sponge roll
 - cake slice decorated with icing or glaze

- moulded and portioned biscuit
- sweet filled pastry slice
- filled sweet non laminated pies or tarts
- mixing, processing, baking and finishing each of the following four types of baked products per shift:
 - bread
 - cake or sponge
 - cookie or biscuit
 - laminated or non laminated pastry
- monitoring operations and addressing variations to the production schedule, ensuring end-product specifications and production targets are met
- documenting and implementing four daily production schedules, including the following production scheduling considerations:
 - production timings
 - product quality
 - reformulation of recipes to suit products
 - finished dough or batter temperatures
 - mixing, processing, baking and finishing requirements for products
 - special equipment or resources required for production
 - scheduling for each stage of the bakery production process, including labour requirements
 - equipment types
- documenting production reports for each of the four shifts that include:
 - scheduling efficiencies for use of equipment and labour in relation to items produced
 - wastage efficiencies of products produced
 - improvements on the scheduling to meet performance
 - product quantities produced in relation to products scheduled
 - completion times of product
 - product quality outcomes.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements applicable to scheduling and producing bakery products

- regulatory requirements for food safety applicable to producing bakery products, including temperature control and the prevention of cross-contamination in the use of dairy, meat, poultry, fish and vegetable products
- considerations relevant to scheduling bakery production, including:
 - production timings
 - product quality
 - reformulation of recipes to suit products
 - finished dough or batter temperatures
 - mixing, processing, baking and finishing requirements for products
 - special equipment or resources required for production
 - scheduling for each stage of the bakery production process
 - equipment types
- considerations relevant to reporting on production outcomes, including:
 - scheduling efficiencies, and whether completion times were met
 - wastage efficiencies of products produced
 - improvements on the scheduling to meet performance
 - product quantities produced in relation to products scheduled
 - completion times of product
 - product quality outcomes
- techniques used to regulate dough and batter maturation and proving, including:
 - temperature control
 - time
- predictable causes of production variation and their likely impact on production targets, including:
 - machine failure
 - product failure
 - calculation errors
 - estimation errors
- production processes for different product ranges, including:
 - use of specific equipment
 - use of specialised ingredients
 - additional preparation requirements
- baking industry terminology relevant to production scheduling.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:

- personal protective equipment
- commercial bakery equipment and information on capacity
- industrial oven
- industrial mixer and attachments
- pastry sheeter or dough break
- refrigeration
- ingredients to meet the product types required in the performance evidence
- specifications:
 - production schedule template that includes a level of detail that accurately represents workplace conditions
 - recipe specifications for product types required in the performance evidence
 - formulae to calculate batch weight to finished product weight
 - end product quality specifications to meet the product types required in the performance evidence
- timeframes:
 - five shifts that can be continuous or staggered, consisting of one shift for upfront scheduling of production of the baked products specified in the performance evidence, and four daily shifts for the production of the baked products specified in the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3016 Control and order bakery stock

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to control and order bakery stock in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Order and receive stock	1.1 Process stock orders in accordance with workplace procedures 1.2 Maintain and adjust stock re-order cycles to meet bakery

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	requirements 1.3 Check and record incoming stock against order and delivery specifications to identify discrepancies and rectify 1.4 Check food product packaging on delivery to identify damage and rectify 1.5 Check and record temperature on delivery of frozen and chilled food products to ensure food safety standards are met, and rectify 1.6 Date code perishable items on delivery to maximise use 1.7 Communicate with suppliers to ensure continuity of supply 1.8 Monitor ordering and supply processes to identify problems and rectify
2. Store stock	2.1 Keep stock to maximise use and minimise waste 2.2 Clean storage areas to meet food safe housekeeping requirements 2.3 Inspect storage areas to identify indicators of pest contamination and rectify 2.4 Use safe manual handling techniques to move and store stock 2.5 Label stock with dates in accordance with workplace procedures 2.6 Store perishable stock in sealed containers to avoid food contamination and pests 2.7 Monitor and maintain cleanliness of stock handling and storage areas to meet housekeeping and hygiene requirements
3. Maintain stock	3.1 Monitor and record stock levels in accordance with workplace procedures 3.2 Monitor stock performance to determine stock usage rate 3.3 Rotate stock according to use-by date to maximise use and minimise waste 3.4 Check and adjust environmental conditions to maintain quality of perishables 3.5 Conduct temperature checks of perishables to identify storage problems, and rectify to protect perishables from spoilage 3.6 Inspect items for pest damage and infestation and dispose of spoiled stock according to workplace procedures
4. Minimise stock losses	4.1 Check storage of stock to identify stock problems, and rectify to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	maintain stock quality 4.2 Identify, record and report stock losses in accordance with workplace procedures 4.3 Identify avoidable losses and determine the cause of the loss to recommend and implement solutions to prevent future avoidable losses

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from order, delivery and supplier information, use-by dates, stock labels and workplace procedures
Numeracy	- Identifies and comprehends measurements, including stock volumes and perishables, and stock area temperature and humidity - Interprets safe food condition temperature range requirements for perishables and stores - Uses thermometers to measure temperatures - Completes stock records using mathematical symbols and conventions - Performs calculations and estimations to determine stock levels
Writing	Completes stock records and forms using required format, language and structure
Oral communication	Uses vocabulary relevant to role and context to convey information clearly to suppliers
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action - Uses digital technologies to set process parameters

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3016 Control and order bakery stock	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3016 Control and order bakery stock

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has controlled and ordered bakery stock, including:

- controlling and ordering three types of bakery stock, including:
 - refrigerated goods
 - frozen goods
 - dry store goods
- checking stock re-order levels
- completing stock order forms
- checking the following five requirements during receiving of stock:
 - incoming stock against order specifications
 - packaging condition
 - date codes of perishable items
 - temperature of perishables
 - ordered stock against supply arrangements, including time and delivery arrangements
- adhering to the following three requirements during storage of stock:
 - applying date labels to stock with limited shelf life
 - checking the condition of storage containers for damage
 - using safe manual handling procedures for lifting and moving ingredients
- meeting the following five requirements while maintaining the storage of stock:
 - cleaning dry goods storage areas
 - cleaning refrigerated goods storage areas
 - cleaning frozen goods storage areas
 - checking storage areas for pest contamination and identifying pest infestation indicators
 - rotating stock according to date codes on ingredients, and recording out-of-date stock

- identifying and recording the following information in the process of ordering, receiving, storing and maintaining stores:
 - spoilt stock
 - stock losses
 - the cause of stock losses.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to controlling and ordering bakery stock
- food safety procedures applicable to controlling and ordering bakery stock, including:
 - using storage containers
 - labelling and coding stock
 - humidity
 - temperature
 - ventilation
 - protection from common pests
 - protection from heat
 - protection from air conditioning
 - protection from accidental damage by people
 - protection from environmental heat
 - protection from environmental light
 - sanitary cleanliness
- types of bakery stock, including:
 - refrigerated goods
 - frozen goods
 - dry store goods
- principles of stock control, including:
 - rotation and replenishment
 - supplier lead times
 - safety stock
 - stock re-order levels
 - product life cycle and maximising the use of all stock
 - checking for usage rates of stock
 - segregating non-food items from food items that have the potential to cause contamination
- storage areas and the cleaning requirements to maintain hygienic conditions, including:
 - dry stores
 - cool rooms

- freezers
- refrigerators
- types of contamination, including:
 - microbiological
 - chemical
 - physical
- types of stock quality checks, including:
 - type
 - quantity
 - use-by date
 - damaged packaging
 - odour
 - colour
- techniques for measuring and recording temperature in bakery stores
- bakery stores terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a retail bakery or an environment that accurately represents workplace conditions
 - designated delivery area
 - designated storage area for the bakery stock types required in the performance evidence
- resources, equipment and materials:
 - personal protective equipment
 - thermometer
 - refrigerated storage
 - frozen storage
 - dry storage
 - ingredients that meet the bakery stock types required in the performance evidence
 - temperature recording charts
- specifications:
 - food safe temperature tolerances
- relationships (internal and/or external):
 - bakery suppliers
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3017 Operate plant baking processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to operate interrelated bread plant baking processes in a commercial baking environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPRBK3005 Produce basic bread products.

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select plant baking equipment, and load and position materials, ingredients and products to meet production requirements
2. Mix bread plant dough	2.1 Measure ingredient quantities to meet recipe specification 2.2 Load ingredients into mixer in required placement 2.3 Operate and monitor mixer to achieve bread plant dough development for product type 2.4 Monitor bread plant dough mixing process to identify faults and rectify
3. Operate bread plant divider	3.1 Check condition and operation of dividing plates to prepare for operation 3.2 Check bread plant hopper and divider plates are oiled for use 3.3 Adjust bread plant divider settings for dough weight 3.4 Load dough into hopper and operate bread plant divider to divide dough 3.5 Measure dough weights to confirm divided dough meets weight specifications 3.6 Monitor bread plant dividing process to identify faults and rectify
4. Operate bread plant rounder moulder	4.1 Check condition and operation of bread plant rounder moulder to prepare for operation 4.2 Adjust bread plant rounder moulder settings for dough weight 4.3 Use bread plant rounder moulder to mould dough 4.4 Check dough tightness and smoothness of dough to identify faults and rectify 4.5 Check dough positioning for depositing into intermediate prover pockets to identify faults and rectify 4.6 Monitor bread plant moulding process to identify faults and rectify
5. Operate bread plant intermediate prover	5.1 Check condition, rotation and operation of bread plant intermediate prover to prepare for operation 5.2 Adjust bread plant intermediate prover settings to match speed of

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	production 5.3 Check dough pockets to identify faults and rectify 5.4 Dust as required for product type 5.5 Monitor bread plant intermediate proving process to identify faults and rectify
6. Operate bread plant final moulder	6.1 Check condition and operation of bread plant final moulder to prepare for operation 6.2 Adjust bread plant final moulder settings for dough volume 6.3 Adjust bread plant final moulder plates and blades for dough type 6.4 Monitor 4-piecing unit and adjust to achieve optimum formation in tins 6.5 Monitor bread plant final moulding process to identify faults and rectify
7. Complete bread plant dough final prove	7.1 Locate and position bread pans and oiling equipment for final moulded dough 7.2 Place final moulded dough in oiled pans to prepare for final prove 7.3 Complete final prove of bread plant bread according to product type 7.4 Monitor bread plant final proving process to identify faults and rectify
8. Bake bread plant dough	8.1 Set baking temperatures and times to prepare for baking 8.2 Visually check dough size to confirm readiness for baking 8.3 Load oven and steam as required for product type 8.4 Monitor baking to achieve baked colour and stability required for bread plant product type 8.5 Unload and de-pan bread plant products to cool 8.6 Monitor bread plant baking process to identify faults and rectify 8.7 Check bread plant products bake to identify faults and rectify
9. Complete work	9.1 Clean equipment and work area to meet housekeeping standards 9.2 Dispose of waste according to workplace requirements 9.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, and water and dough temperatures - Divides dough into equal portions by estimated weight - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to set and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Plant baking equipment must include:	• equipment, including: • industrial oven • industrial mixer and attachments • bread plant dough divider • bread plant dough rounder moulder • bread plant intermediate prover • bread plant final moulder • mechanical bread slicer • equipment accessories, including: • divider blades • intermediate prover pockets • moulder plates • ancillary equipment, including: • dry ingredients storage containers • strapped baking tins • strapped baking tin lids • ingredient storage bins • tools and utensils, including: • thermometer • timer • dough knives • dough scrapers.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3017 Operate plant baking processes	Not applicable	New unit	Not equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3017 Operate plant baking processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has operated plant baking processes to produce bread plant products, including:

- producing the following four bread plant dough types:
 - white bread
 - brown or wholemeal bread
 - grain bread
 - enriched sweet yeast bread
- producing the following five bread products:
 - crusty/lean loaf – plaited, Vienna, cob or stick
 - enriched sweet yeast bread loaf as high top or condensed loaves
 - enriched bread loaves as condensed or high top
 - brown or wholemeal bread loaves as high tops, condensed, cobs or Viennas
 - grain bread loaves as high tops, condensed, cobs or Viennas
- using the following two mixing processes:
 - mixing instant/no time doughs
 - mixing ferment
- using the following four bread plant processes:
 - bread plant dough divider
 - bread plant dough rounder moulder
 - bread plant intermediate prover
 - bread plant final moulder
- using the following three finishing techniques:
 - seeding
 - steaming

- scoring
- using lids to condense loaves
- adjusting bread plant equipment settings to meet process output requirements
- inspecting equipment condition to identify and confirm that equipment is clean and configured for processing requirements
- positioning sensors or controls
- ensuring safety guards are in place and operational
- loading and positioning materials in bread plant equipment
- monitoring material flow and work-in-progress through the system
- selecting tins, bread boards, baskets or trays appropriate for dough piece scale weight, volume and size
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following nine considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - bread plant dough divider setting for product requirement
 - bread plant dough rounder moulder setting for product requirement
 - bread plant intermediate prover setting for product requirement
 - bread plant final moulder setting for product requirement
 - bake parameters for required products.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment (PPE), applicable to operating plant baking processes
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- food safety requirements applicable to operating plant baking processes
- considerations for production scheduling of plant baking processes, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste

- bread plant dough divider setting for product requirement
- bread plant dough rounder moulder setting for product requirement
- bread plant intermediate prover setting for product requirement
- bread plant final moulder setting for product requirement
- bake parameters for required products
- functions and characteristics of ingredients used in bread plant production, including food grade equipment oils in plant bread baking
- purpose and basic principles of the production system, including the flow of product from plant divider to plant rounder moulder to plant intermediate prover to plant final moulder
- basic operating principles of equipment and related accessories, including:
 - equipment adjustment points
 - purpose and status of guards
 - range, location and alignment requirements of sensors and related feedback instruments
 - single and multi-pocket dividers
 - spray panning units
 - de-panner units
 - conveyors
- operating capacities of equipment used in the system, including:
 - output capacity of mixer
 - output capacity of divider
 - total time through bread plant process from mixer to final plant moulder
 - principles of the bread plant baking production processes, including:
 - mixing
 - bread plant divider
 - bread plant rounder moulder
 - bread plant intermediate prover
 - bread plant final moulder
- techniques for calculating yields, adjusting recipes and measuring ingredients
- causes and corrective action for predictable and sometimes unpredictable bread plant problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients
- techniques for disposing of waste after bread plant production
- bread plant production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:

- a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions, and related accessories and services
 - ingredients that meet the bread plant products types required in the performance evidence
- specifications:
 - recipes that meet the bread plant product types required in the performance evidence
 - end-product quality specifications that meet the bread plant product types required in the performance evidence
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK3018 Produce basic artisan products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce basic artisan products in a commercial baking environment. Basic artisan products include European basic artisan products, cultural basic artisan products, laminated basic artisan products, fried basic artisan products, highly enriched basic artisan products and festive occasion basic artisan products.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volumes 1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select basic artisan baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Mix basic artisan doughs	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Load ingredients into mixer in required ingredient placement 2.3 Operate and monitor mixer to achieve basic artisan dough development for product type 2.4 Check mixed basic artisan dough to identify faults and rectify
3. Process basic artisan dough	3.1 Divide, scale, mould and intermediate prove basic artisan dough to meet required end-product shape and baked weight 3.2 Final mould and place on baking surfaces for final prove 3.3 Laminate basic artisan dough with laminating fat as required for product type 3.4 Retard basic artisan dough as required for product type 3.5 Final prove basic artisan dough as required for product type 3.6 Check processed basic artisan dough to identify faults and rectify
4. Pre-bake finish basic artisan products	4.1 Prepare pre-bake finishing mediums to recipe specification 4.2 Pre-bake finish basic artisan products to meet end-product specification 4.3 Check pre-bake finished basic artisan products to identify faults and rectify
5. Fry basic artisan products	5.1 Set frying temperatures and times to prepare for frying 5.2 Visually check basic artisan dough size to confirm readiness for frying

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.3 Load fryer and monitor frying to maintain fryer temperatures 5.4 Unload basic artisan fried products to cool 5.5 Check fried basic artisan products to identify faults and rectify
6. Bake basic artisan products	6.1 Set baking temperatures and times to prepare for baking 6.2 Visually check dough size to confirm readiness for baking, and load oven as required for product type 6.3 Monitor baking to achieve baked colour and stability required for basic artisan product type 6.4 Unload, de-pan and cool to meet basic artisan product type 6.5 Check basic artisan product to identify faults and rectify
7. Post-bake/fry finish basic artisan products	7.1 Prepare post-bake finishing mediums to meet recipe specifications 7.2 Post-bake finish baked and fried basic artisan products to meet end-product specification 7.3 Check post-baked finished basic artisan products to identify faults and rectify 7.4 Prepare and transfer basic artisan products for presentation and storage according to packaging and food safety requirements
8. Complete work	8.1 Clean equipment and work area to meet housekeeping standards 8.2 Dispose of waste according to workplace requirements 8.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure

Skill	Description
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, water and dough temperatures, and dough and product dimensions - Divides dough into equal portions by estimated weight - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Basic artisan baking equipment must include:	- equipment, including: - industrial oven - industrial mixer and attachments - pastry sheeter, dough break or rolling pin - ancillary equipment, including: - oven baking trays - cooling wires - dough and pastry benches - tools and utensils, including: - rolling pins

	• oven gloves • plastic and metal scrapers • containers used to store fillings • bowls and measuring jugs.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK3018 Produce basic artisan products	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK3018 Produce basic artisan products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced basic artisan products according to a production schedule, including:

- producing the following seven basic artisan products:
 - laminated yeast dough as a croissant product
 - sweet laminated yeast dough as a danish product
 - basic artisan product as a display plaque
 - festive basic artisan product
 - lean basic artisan product as rolls or loaves
 - fried basic artisan product as decorated donuts
 - highly enriched basic artisan product
- processing one of the above basic artisan bread products as a retarded product
- mixing and using the following three doughs:
 - instant dough/scratch mix/no time dough
 - ferment
 - salted/dead display dough
- using the following three moulding techniques:
 - hand moulding
 - machine moulding
 - laminating yeast dough
- using the following two finishing techniques:
 - pre-bake finishing using pastes, washes or glazes
 - using creams, icings, chocolate or fondant to finish baked or fried product
- selecting, using and cleaning the basic artisan baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning

- selecting and using tins and trays appropriate for dough piece scale, weight, volume and size
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for basic artisan product
 - baked parameters for basic artisan product.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing basic artisan products
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing basic artisan products
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - finishing requirements for basic artisan product
 - baked parameters for basic artisan product
- functions and characteristics of ingredients used in basic artisan production, including:
 - flour types
 - salt
 - yeast
 - fats
 - flavours and spices
 - fondant
 - chocolate
 - icing and glazes
- processes for making:
 - instant dough/scratch mix/no time dough

- ferments
- display doughs
- principles of retarding basic artisan products, including:
 - mixing
 - dough temperatures
 - cooling retarded products
 - warm phase with retarded products
- mixing processes and gluten development for:
 - highly enriched doughs
 - laminated doughs
 - display doughs
- types and use of pre-baked finishing for basic artisan products
- types and use of post-baked finishing for basic artisan products
- techniques for shaping basic artisan products, including:
 - crescent
 - plaque
 - rolls
 - loaf
- storage and shelf life of basic artisan products, including:
 - croissants – laminated
 - danish – laminated
 - lean crusty doughs
 - basic artisan display plaques
 - enriched basic artisan products
 - fried basic artisan products
- processing techniques for laminated doughs, including:
 - English method laminating
 - French method laminating
 - using lean and enriched doughs for laminating
 - selecting and using fats in lean and enriched laminated doughs
 - mixing of laminated doughs
 - proving and baking of laminated doughs
- processing of dough for display purposes, including:
 - using display dough
 - baking of display doughs
 - colouring of display doughs
- techniques for calculating yields, adjusting recipes and measuring ingredients
- purpose and functions of basic artisan baking and frying processes, including:
 - oven temperatures
 - baking times

- proving times and temperatures
- dry proving
- frying temperatures
- causes of and corrective action for predictable and sometimes unpredictable basic artisan production problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients
 - poor oil quality in frying
- techniques for disposing of waste from basic artisan product production
- basic artisan product production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - deep fryer
 - tins
 - trays
 - ingredients that meet the basic artisan product types required in the performance evidence
- specifications:
 - recipes that meet the basic artisan product types required in the performance evidence
 - end-product quality specifications to meet the basic artisan product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing basic artisan products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4001 Produce artisan bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce artisan bread products in a commercial baking environment.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPRBK3005 Produce basic bread products.

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet required production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select artisan bread baking equipment and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity
2. Prepare artisan bread fillings	2.1 Measure artisan filling ingredient quantities and prepare to meet recipe specification 2.2 Check artisan fillings to identify faults and rectify 2.3 Store artisan fillings according to food safety requirements
3. Mix artisan ferments	3.1 Measure artisan ferment ingredient quantities to meet recipe specifications 3.2 Load ingredients into mixer in required ingredient placement 3.3 Operate and monitor mixer to achieve artisan bread dough development for product type 3.4 Check artisan ferment to identify faults and rectify 3.5 Store artisan ferments according to food safety and product requirements
4. Mix artisan bread dough	4.1 Measure artisan bread dough ingredient quantities to meet recipe specifications 4.2 Load ingredients into mixer in required ingredient placement 4.3 Operate and monitor mixer to achieve artisan bread dough development for product type 4.4 Add fillings as required to meet artisan bread product type 4.5 Check artisan dough to identify faults and rectify
5. Process artisan bread dough	5.1 Divide, scale and mould dough to meet end-product shapes and baked weights 5.2 Fold in fillings as required to meet product type 5.3 Rest and fold artisan dough as required for product type 5.4 Check artisan dough to confirm strength and tenacity 5.5 Scale artisan dough for intermediate prove

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	5.6 Final mould artisan dough and place on baking or proving surfaces for final prove 5.7 Retard artisan dough as required for product type 5.8 Check processed artisan dough to identify faults and rectify
6. Pre-bake finish artisan bread products	6.1 Prepare pre-bake finishing mediums to meet recipe specifications 6.2 Pre-bake finish artisan products to meet end-product specifications 6.3 Check pre-bake finished artisan products to identify faults and rectify
7. Bake artisan bread products	7.1 Set baking temperatures and times to prepare for baking 7.2 Visually check artisan dough size to confirm readiness for baking 7.3 Load oven and steam artisan bread as required for product type 7.4 Monitor baking to achieve baked colour and stability required for artisan bread product type 7.5 Unload and de-pan artisan baked products to cool 7.6 Check artisan bread product to identify faults and rectify 7.7 Prepare and transfer products for presentation and storage according to packaging and food safety requirements
8. Complete work	8.1 Clean equipment and work area to meet housekeeping standards 8.2 Dispose of waste according to workplace requirements 8.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions, and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure

Skill	Description
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, and temperature, humidity and timer settings - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes, water and dough temperatures, and dough and product dimensions - Divides dough into equal portions by estimated weight - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to mould dough shapes and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Artisan bread baking equipment must include:	- equipment, including: - industrial oven - industrial mixer and attachments - cool room or refrigerator - equipment accessories, including: - oven setter boards, trays or belts - cool room or refrigerator shelving - ancillary equipment, including: - dough proving tubs - mixing bowls

	• proving boards/trays • proving racks • dry ingredient storage containers • cutting boards • tools and utensils, including: • bread knives • scoring knives • food processing knives • dough scrapers • spray bottles • sieves.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4001 Produce artisan bread products	FDFRB3013A Produce artisan breads	Redesigned unit that includes content from previous unit Code changed to reflect AQF alignment	No equivalent unit
	FDFRB4004A Produce sourdough products	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4001 Produce artisan bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced artisan bread products according to a production schedule, including:

- producing the following four artisan bread dough types:
 - sour dough pre-ferment dough
 - non sour pre-ferment dough
 - bulk ferment dough
 - sponge and dough
- using the following two sour types to produce the sour dough:
 - soft levain sour/poolish
 - stiff levain sour/biga
- using the following three mixing techniques:
 - low dough development
 - medium dough development
 - intensive dough development
- producing the following seven product shapes:
 - batard (Vienna)
 - bolais (round)
 - freeform
 - baguette
 - pan bread
 - flat bread
 - bread roll
- preparing and adding the following two filling types:
 - fruit filling

- savoury filling
- incorporating fillings using the following two methods:
 - including filling in artisan dough during mixing process
 - folding filling into artisan dough during folding process
- using the following three finishing techniques:
 - decorative dusting
 - decorative scoring
 - glazing
- selecting, using and cleaning the bread baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following five considerations:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - baked parameters for artisan bread products.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing artisan bread products
- safe use and cleaning of bread baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing artisan bread products, including temperature control and prevention of cross-contamination in the use of dairy products, meat, poultry, fish products and vegetable products
- techniques and considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - recipe reformulation to minimise waste
 - baked parameters for artisan bread products
- functions and characteristics of ingredients used in artisan bread production, including:
 - artisan flour varieties
 - yeast used in artisan bread products
- preparing sours, including:

- source and characteristics of sours
- techniques for developing sours
- techniques for using sour
- techniques for feeding sours
- matching of sours to artisan bread product types
- artisan production processes, including:
 - mixing of artisan ferments
 - types of artisan ferments
 - artisan folding processes
 - artisan proving processes
 - artisan baking processes
- artisan mixing techniques and mixing outcome requirements for:
 - low dough development
 - medium dough development
 - intensive dough development
- product types, processes and characteristics of artisan product types, including:
 - batard (Vienna)
 - bolais (round)
 - freeform
 - baguette
 - flat bread
- types of fillings used in artisan breads:
 - fruit filling
 - savoury filling
- methods of incorporating fillings, including:
 - including filling in artisan dough during mixing
 - folding filling into artisan dough during folding process
- techniques and requirements for finishing, including:
 - decorative dusting
 - decorative scoring
 - glazing
- impacts on production of different artisan bread products, including:
 - length and duration of ferments
 - refrigeration space for processing artisan doughs
 - oven capacity and length of bake
 - scheduling different artisan ferment varieties to match production timing
- required characteristics of artisan bread products, including:
 - aroma
 - flavour
 - crumb structure

- strength and tenacity
- causes and corrective action for predictable and sometimes unpredictable bread production problems, including:
 - machinery failure
 - environmental factors, including heat, humidity and cold
 - poor quality ingredients
- techniques for disposing of waste from artisan bread production
- artisan bread production terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment
 - equipment specified in the range of conditions
 - trays
 - ingredients that meet the artisan bread product types required in the performance evidence
- specifications:
 - recipes that meet the artisan bread product types required in the performance evidence
 - end-product quality specifications to meet the artisan bread product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing artisan bread products
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4002 Develop advanced artisan bread methods

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to develop advanced artisan bread methods in a commercial baking environment.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPRBK4001 Produce artisan bread products.

Note the following chain of prerequisites that also applies to this unit.

Unit of competency	Prerequisite requirement
FBPRBK4001 Produce artisan bread products	FBPRBK3005 Produce basic bread products

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Conduct advanced artisan bread product experiments	1.1 Research and analyse local and international advanced artisan bread making trends to extend knowledge of artisan dough rheology 1.2 Apply knowledge of advanced artisan bread making to inform advanced artisan bread making ideas 1.3 Adapt recipes and processes based on advanced artisan bread making ideas 1.4 Use experimentation to trial and refine advanced artisan bread ideas and achieve desired advanced artisan bread product outcomes 1.5 Produce advanced artisan bread products using recipes and baking processes based on research and experimentation 1.6 Document trial outcomes, recipes and process and product specifications according to workplace procedures
2. Apply advanced finishing methods to bread	2.1 Research and analyse advanced finishing trends to extend knowledge of advanced finishing methods 2.2 Apply knowledge of advanced finishing methods to inform advanced finishing design ideas 2.3 Finish advanced artisan bread products using advanced design methods of moulding and scoring
3. Apply sensory analysis to assess advanced bread products	3.1 Prepare advanced bread product evaluation samples for sensory analysis testing 3.2 Undertake sensory analysis of bread samples to evaluate bread properties 3.3 Document sensory analysis findings for advanced bread product according to workplace requirements
4. Provide advice on food and beverage compatibility	4.1 Assess the compatibility of advanced artisan breads with food items and beverages 4.2 Develop informed opinions to support the selection of compatible food and beverage items with flavour profiles of advanced artisan bread products 4.3 Document food and beverage matching to support advanced artisan bread products according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Learning	Undertakes independent research and experimentation, and reflects on performance to build own knowledge and skills of advanced artisan bread making methods
Reading	Sources, interprets and analyses advanced artisan bread making information from a range of technical baking industry texts
Writing	Prepares recipes, trial records, process and product specifications, sensory analysis outcomes and compatibility documentation using structure, technical language and format appropriate to purpose
Numeracy	- Extracts and interprets mathematical information embedded in technical baking industry texts - Performs calculations and uses baking product formulas to interpret, adapt and adjust artisan bread recipes - Uses mathematical symbols and conventions relevant to the baking industry to document trial outcomes, recipes, and process and product specifications
Navigate the world of work	Works independently to keep abreast of advanced artisan bread making trends
Interact with others	Recognises the importance of consulting with others when formulating advice on food and beverage pairing
Get the work done	- Uses problem-solving skills to analyse and evaluate advanced artisan bread making ideas and trial outcomes and decide on appropriate action - Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Advanced finishing methods must include:	- advanced stencilling using speciality stencils - oiled dough skins - advanced scoring

	• advanced moulding.
Bread properties must include:	• flavour profiles • crumb and crust textures • internal and external appearance • aromas • baked condition.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4002 Develop advanced artisan bread methods	Not applicable	New unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4002 Develop advanced artisan bread methods

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has developed advanced artisan bread making methods to produce three different artisan bread varieties, where the advanced methods include:

- using the following three flours, including:
 - rye flour
 - whole wheat flour
 - speciality flour
- producing one of the artisan bread varieties with a total hydration of 80–90% on total flour weight
- producing the following three types of advanced artisan bread products incorporating an extended fermentation period, a pre-ferment dough and excluding bread improvers:
 - Italian loaf
 - French loaf
 - German loaf
- preparing and developing the following three flavours in the doughs:
 - a perpetual sour
 - a creative gourmet fruit
 - a creative gourmet savoury
- creating and using two advanced specialty artisan bread stencils:
 - logo stencil
 - artistic stencil
- applying oiled dough skins to advanced artisan bread doughs as an advanced baked finishing method
- applying advanced decorative cutting and scoring.

The assessment of the advanced artisan bread products listed above must include:

- conducting a sensory analysis of the following:
 - flavour profiles
 - crumb and crust textures
 - internal and external appearance
 - aromas
 - baked condition
- preparing a report on sensory analysis documenting:
 - sour flavours in advanced artisan breads
 - prepared creative gourmet flavoured advanced artisan breads.

The advice provided on food and beverage compatibility of the products listed above must include:

- the following advanced artisan bread products:
 - prepared perpetual sour bread
 - prepared creative gourmet sweet bread
 - prepared creative gourmet savoury bread
- food matching against two of the following four food groups:
 - meat
 - dairy
 - fruit or jams or jellies
 - pates or dips or spreads
- food matching against two of the following three beverage groups:
 - white or red wine
 - beer or cider
 - non-alcoholic beverage.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- advanced artisan bread product types, including extended fermentation periods and pre-ferments for:
 - Italian loaf
 - French loaf
 - German loaf
- techniques for preparing and developing the flavours into the artisan doughs, including:
 - perpetual sour
 - creative gourmet sweet flavour
 - creative gourmet savoury flavour

- changes in advanced artisan bread products when there are high hydration rates of 80–90% based on total flour weight
- types of specialty bread stencils
- techniques for designing, cutting and using specialty bread stencils on advanced artisan bread products
- techniques for producing oiled dough skins
- advanced decorative scoring on advanced artisan breads, including scoring to control direction of tear and scoring to create decorative designs
- types and varieties of advanced moulding relevant to advanced artisan breads
- factors affecting sensory analysis when applying the five senses to baked products, including:
 - sight, including lighting effect, crumb colour and baked colour
 - smell, including effect of fermentation time and sours on aroma and acidic aromas
 - taste, including effect of temperature, sour quality, hydration level and fermentation time on flavour profile
 - touch, including effect of processing methods, recipes and baking on softness in crumb and crust
 - hearing, including effect of baking time and dehydration on tapped sound
- factors affecting sour variations in advanced artisan breads
- principles of food and beverage pairing, including:
 - texture
 - flavour profiles, including acidity, sweetness and bitterness
 - weight of food
 - body of wine
 - complement and contrast
- how the flavours and textures of the following complementary food products can affect the flavours and textures of advanced artisan breads:
 - meat
 - dairy
 - fruit or jams or jellies
 - pates or dips or spreads
- how the characteristics and flavours of the following beverages can affect the flavours and texture of advanced artisan breads:
 - white or red wine
 - beer or cider
 - non-alcoholic beverage
- advanced artisan bread making terminology
- advanced finishing terminology
- food and beverage pairing terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - industrial mixer and attachments
 - industrial oven
 - personal protective equipment
 - ingredients that meet advanced artisan bread product requirements
- specifications:
 - artisan bread recipes to adapt
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4003 Produce gateaux, tortes and entremets

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to produce and finish gateaux, tortes and entremets in a commercial baking or hospitality environment.

This unit applies to individuals who apply a broad range of knowledge and skills with responsibility for their own work. This includes applying and communicating known solutions to predictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

FBPRBK3010 Produce cake and pudding products.

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for work	1.1 Confirm product types and volumes to schedule production 1.2 Calculate yield and adjust recipe to meet production volumes

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Confirm work area and work practices meet food safety and workplace health and safety requirements 1.4 Select and wear personal protective equipment according to safety requirements 1.5 Select baking equipment for gateaux, tortes and entremets and check to confirm readiness for use 1.6 Select ingredients and check to confirm quality and quantity 1.7 Prepare tins, trays and pans to match type of gateaux, tortes or entremets
2. Prepare bases for gateaux, tortes and entremets	2.1 Measure ingredient quantities to meet recipe specifications 2.2 Process ingredients to mix bases for gateaux, tortes and entremets 2.3 Set and load oven and monitor baking to bake bases 2.4 Check base bake to identify faults and rectify 2.5 Prepare and transfer bases for storage in accordance with food safety requirements
3. Prepare fillings and finishes for gateaux, tortes and entremets	3.1 Measure filling and finishing ingredient quantities to meet recipe specifications 3.2 Process ingredients to make fillings and finishes for gateaux, tortes and entremets 3.3 Check fillings and finishes for gateaux, tortes and entremets to identify faults and rectify 3.4 Prepare and transfer fillings and finishes for storage according to food safety requirements
4. Assemble gateaux, tortes and entremets	4.1 Prepare bases for assembly to meet product type 4.2 Combine fillings and bases to assemble gateaux, tortes and entremets as required for product type 4.3 Check assembly for gateaux, tortes and entremets to identify faults and rectify
5. Finish gateaux, tortes and entremets	5.1 Apply finishes to gateaux, tortes and entremets as required for product type 5.2 Apply garnishes to finish gateaux, tortes and entremets as required for product type 5.3 Check finishing for gateaux, tortes and entremets to identify faults

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	and rectify 5.4 Prepare and transfer finished gateaux, tortes and entremets for presentation and storage according to packaging and food safety requirements
6. Complete work	6.1 Clean equipment and work area to meet housekeeping standards 6.2 Dispose of waste according to workplace requirements 6.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information from recipes, ingredient labels, baking equipment operating instructions and end-product specifications
Writing	Prepares production schedules and completes production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, temperature and timer settings and product dimensions - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes and product dimensions - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes - Interprets measurement information to set, monitor and adjust process parameters - Completes production records using mathematical symbols and conventions
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role

Skill	Description
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults and decide on appropriate action

Range of Conditions

This section specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Baking equipment for gateaux, tortes and entremets must include:	- equipment, including: - industrial mixer and attachments - freezer - cool room or refrigerator - industrial cook tops - equipment accessories, including: - dough hook attachment - cake beater attachment - cake whisk attachment - ancillary equipment, including: - rolling pin - cake hoops or tins - equipment to temper chocolate - plateware for entremets - tools and utensils, including: - pallet knives - ladles or spoons - scrapers - cake knives.
Bases must include:	- cake - laminated or short pastry.
Fillings and finishes must include:	- sabayon or custard - aerated creams - chocolate-based glazes or sauces - tempered couverture chocolate - fruit fillings

	• bavarois or mousse • meringue or butter cream • chocolate or sugar garnishes.

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4003 Produce gateaux, tortes and entremets	FDFRB3015A Produce gateaux, tortes and entremets	Redesigned unit that includes content from previous unit Code changed to reflect AQF alignment	No equivalent unit
	FDFRB3012A Diagnose and respond to product and process faults (pastry, cake and cookies)	Redesigned unit that includes content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4003 Produce gateaux, tortes and entremets

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has produced gateaux, tortes and entremets according to a production schedule, including:

- producing the following three products:
 - gateaux
 - torte
 - small entremets
- presenting entremets on plateware appropriate for the entremets type, with the following three finishes:
 - using a sauce or coulis to present entremets
 - using a garnish of sugar or chocolate to present entremets
 - using an ice cream or sorbet to present with entremets
- producing gateaux and tortes using the following two bases made from scratch ingredients:
 - non laminated or laminated pastry
 - cake
- using the following three processes for producing gateaux, tortes and entremets:
 - chilling
 - freezing
 - baking
- using the following eight fillings and finishes prepared from scratch ingredients:
 - sabayon or custard
 - aerated creams
 - chocolate-based glazes or sauces
 - tempered couverture chocolate
 - fruit fillings

- bavarois or mousse
- meringue or butter cream
- chocolate or sugar garnishes
- using the following three decorating techniques for gateaux and tortes:
 - couverture chocolate
 - glazing
 - prepared garnishes
- using the following three garnishes:
 - chocolate garnishes
 - sugar garnishes
 - baked garnish
- selecting, using and cleaning the baking equipment listed in the range of conditions, including controlling electrical hazards applicable to cleaning
- documenting the production schedule, including the following six considerations:
 - timings
 - volume requirements
 - product processing requirements
 - finishing requirements for gateaux, tortes and entremets
 - presentation of gateaux, tortes and entremets
 - recipe reformulation to minimise waste.

Wastage that cannot be reused in production must be less than 5% of the weight of the original production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to producing gateaux, tortes and entremets
- safe use and cleaning of baking equipment listed in the range of conditions, including electrical hazards
- regulatory requirements for food safety applicable to producing gateaux, tortes and entremets
- considerations for production scheduling, including:
 - timings
 - volume requirements
 - product processing requirements
 - finishing requirements for gateaux, tortes and entremets
 - presentation of gateaux, tortes and entremets
 - recipe reformulation to minimise waste

- distinguishing characteristics of types of gateaux, tortes and entremets, including:
 - cold-set gateaux
 - multi-layered tortes
 - small entremets
- types of fillings and finishes, including:
 - sabayon
 - aerated creams
 - chocolate-based glazes and sauces
 - tempered couverture chocolate
 - bavarois or mousse
 - meringue
 - butter creams
 - baked garnish
 - custard
 - fruit filling
 - chocolate garnish
 - sugar garnish
- techniques for presenting entremets, including:
 - selecting plateware
 - presenting entremets at the appropriate temperature for the product type
- techniques for finishing, including:
 - using sauces and coulis to present entremets
 - using garnishes of sugar to present entremets
 - using garnishes of chocolate to present entremets
- assembling gateaux, tortes and entremets
- preparing cake tins and hoops
- purpose and functions of production settings, including:
 - oven temperatures
 - baking times
 - chill times
- required characteristics of gateaux, tortes and entremets, including:
 - appearance
 - consistency
 - shape
 - taste
 - texture
 - complementing flavours
- causes and corrective action for predictable and sometimes unpredictable production problems, including:
 - machinery failure

- environmental factors, including heat, humidity and cold
- poor quality ingredients
- techniques for disposing of waste from product production
- requirements for chilling and freezing gateaux, tortes and entremets
- product production terminology for gateaux, tortes and entremets.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - equipment specified in the range of conditions
 - personal protective equipment
 - mixing bowls
 - piping bags and nozzles
 - industrial oven
 - tins and trays
 - measuring cups and spoons
 - ingredients that meet the product types required in the performance evidence
 - pre-made flavoured ice cream or sorbet
 - prepared garnishes
- specifications:
 - recipes that meet the types of gateaux, tortes and entremets required in the performance evidence
 - end-product quality specifications to meet the product types required in the performance evidence
 - food safety code regulatory requirements applicable to producing gateaux, tortes and entremets
- timeframes:
 - according to the production schedule.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4004 Develop baked products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to apply baking techniques to develop baked products in a commercial baking environment.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify product development opportunity	1.1 Research baked product trends to identify opportunities for new product development for local market 1.2 Review current baked product range to identify opportunities for

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	improving products and processes 1.3 Evaluate identified opportunities to define and document product development purpose and concept
2. Specify development requirements	2.1 Interpret product development concepts to prepare product specifications 2.2 Develop and document draft recipes to meet product specifications and Food Standards Code 2.3 Adjust draft recipes to meet special dietary, cultural or religious needs 2.4 Select processes and develop draft process specifications and production work flow to meet product specifications 2.5 Estimate product costings using draft recipes and draft process specifications
3. Prepare for production trials	3.1 Schedule and confirm availability of equipment to meet draft process specifications 3.2 Identify ingredients to meet draft recipes and check to confirm quality and quantity 3.3 Identify equipment and resource constraints, and resolve according to workplace procedures 3.4 Identify and assess food safety and workplace health and safety risks, and determine risk controls
4. Conduct production trials	4.1 Produce trial products using draft recipes and process specifications 4.2 Implement and monitor food safety and workplace health and safety risk controls 4.3 Monitor production trial to identify production trial problems and rectify 4.4 Record production trial process data according to workplace procedures 4.5 Evaluate trial products against product specifications to identify non-conformances 4.6 Interpret process data and trial product evaluation results to adjust recipes and process variables, and coordinate successive production trials to meet product specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.7 Record production trial variables and results according to workplace procedures
5. Confirm product development	5.1 Schedule and reproduce product to confirm recipe and process specification 5.2 Assess suitability of existing packaging supplies for final product packaging 5.3 Evaluate final product to verify product specifications and food safety requirements are met 5.4 Calculate final product cost using final recipes and process specifications 5.5 Determine product pricing and confirm commercial viability

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Learning	Builds on knowledge of baking products and processes based on production trial outcomes
Reading	Sources and interprets a range of technical baking industry texts to determine relevance and usefulness for product development
Writing	Prepares recipes, production trial records and process and product specifications using structure, technical language and format appropriate to purpose
Numeracy	- Extracts and interprets mathematical information embedded in technical baking industry texts - Interprets financial information, including fixed and variable costs, profit margins and sale price ranges - Performs calculations to develop and adjust recipes using baking formulas - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes and determine size of packaging for product - Interprets measurement information to set, monitor and adjust

Skill	Description
	process parameters • Uses mathematical symbols and conventions to document recipes, production trial records, and process and product specifications
Navigate the world of work	• Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation • Follows organisational policies and procedures relevant to own work role
Get the work done	• Uses problem-solving skills to evaluate production trial outcomes and decide on appropriate action • Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes • Uses digital technologies to set process parameters

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4004 Develop baked products	FDFRB3017A Participate in product development	Redesigned unit that includes content from the previous unit	No equivalent unit
	FDDRB4006A Explore and apply baking techniques to develop new products	Redesigned unit that includes content from the previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4004 Develop baked products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has developed one of the following baked products, using a minimum of eight ingredients and applying a pre- or post-baked finish component:

- a specialty bread
- a cake based product
- a pastry-based product.

The activities to develop the baked product must include:

- researching product and process development opportunities
- meeting one of the following six purposes:
 - identified market opportunity
 - cost saving for current product
 - healthy eating improvement for current product
 - time and labour improvement for current product
 - product quality improvement for current product
 - a special dietary, cultural or religious need
- preparing trial recipes
- conducting at least one production trial
- evaluating the final product to verify the following seven technical qualities of the product:
 - flavour style
 - moisture
 - structure
 - taste

- symmetry
- appearance
- aroma
- assessing the potential commercial viability of the product, including the following four considerations:
 - cost price versus final sales price
 - local market suitability
 - suitability of packaging and transport
 - compliance with food safety code regulatory requirements for the product and its ingredients.

The individual must prepare a final report that includes the following information:

- product development purpose and concept
- description of the special dietary, cultural or religious need
- production trial variables and results
- final product specification, including product assembly and presentation
- final product recipe
- final process specification
- final production work flow
- final product costing
- final product price.

The individual must reproduce the final product within operational constraints where the maximum waste is less than 5% of the weight of the production schedule.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements, including personal protective equipment, applicable to developing baked products and operating baking equipment
- regulatory requirements for food applicable to developing baked products
- identifying and evaluating product development opportunities
- purposes of product development, including:
 - meeting identified market opportunity
 - cost saving to current product
 - healthy eating improvement to a current product
 - time and labour improvement to a current product
 - product quality improvement to a current product
 - a special dietary, cultural or religious need

- commercial viability considerations used in product development, including:
 - addressing market or business opportunity
 - producing within operational constraints
 - cost price versus final sales price
 - local market suitability
 - suitability of packaging and transport
- types of production trial problems, including:
 - increased ingredient costs
 - non-availability of ingredients
 - equipment breakdown
 - labour shortages
- nature of special dietary requirements and gluten intolerance as it relates to developing baked products, including:
 - eggs
 - fish
 - milk
 - peanut
 - sesame
 - shellfish
 - soy
 - tree nuts
 - wheat
 - food allergy or food intolerance
- nature of cultural needs as they relate to developing baked products, including:
 - Australian
 - Asian
 - Indian
 - Middle Eastern
 - South European
 - African
- nature of religious needs as they relate to developing baked products, including:
 - Buddhism
 - Hinduism
 - Islam
 - Judaism
 - Christianity
- purpose and content of product development documentation, including:
 - product development purpose and concept
 - description of the special dietary, cultural or religious need
 - production trial variables and results

- final product specification, including product assembly and presentation
- final product recipe
- final process specification
- final production work flow
- final product costing
- final product price
- interaction of ingredients and processing variables and their effect on the quality of the final product, including:
 - product formulas
 - process parameters
- product evaluation, including:
 - flavours
 - moisture
 - structure
 - taste
 - symmetry
 - appearance
 - aroma
- techniques for determining product packaging and presentation for baked product development
- using industry standard terminology relevant to baked product development.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
 - local market for which product is to be developed
 - commercial bakery resources, equipment and materials suitable for the development of baked products
 - ingredients that meet baked product requirements
- specifications:
 - food standard code regulatory requirements applicable to developing baked products
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4005 Apply advanced finishing techniques for specialty cakes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to research and apply a range of finishing and decorating techniques for specialty cakes in a commercial baking or professional decorating environment.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Conduct research into	1.1 Identify and access information resources to inform the technical

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
finishing and decorating techniques	and creative aspects of finishing and decorating 1.2 Identify varieties of specialty cake products and explore a range of presentations 1.3 Conduct research into the taste, texture, appearance and presentation of cakes to determine key features of finished effects 1.4 Estimate costs associated with different finishing techniques and features
2. Design finish and decoration for bakery products	2.1 Confirm design parameters, including colours, flavours, any special requirements or preferences, budget, required servings and quantity 2.2 Develop a design for decoration and finishing to meet specialty cake requirements 2.3 Document design according to organisational requirements
3. Plan finishing	3.1 Examine ingredients used in finishing to identify their suitability for finishing techniques 3.2 Develop a specialty cake finishing plan to specify required resources and work sequence 3.3 Source and prepare finishing ingredients 3.4 Prepare equipment for use to meet production requirements 3.5 Prepare bases for finishing
4. Produce finishing and decorating effects	4.1 Produce decorative pieces and garnishes to meet finishing design 4.2 Produce fillings and toppings to meet finishing plan 4.3 Complete product decoration and finishing to finishing plan 4.4 Identify and rectify finishing problems
5. Cost and price final products	5.1 Identify ingredient costs to calculate cost of materials 5.2 Estimate production costs to determine processing costs 5.3 Calculate cost of specialty cake based on ingredient and processing costs 5.4 Price products to according to workplace pricing policy
6. Prepare final products for market	6.1 Assess final cake to estimate product shelf life and required storage conditions 6.2 Prepare cake products for display, sale, packaging and presentation

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	according to organisational requirements 6.3 Identify and rectify storage and presentation problems in accordance with food safety requirements
7. Complete work	7.1 Clean equipment and work area to meet housekeeping standards 7.2 Dispose of waste according to workplace requirements 7.3 Complete workplace records according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	- Interprets client briefs, recipes and ingredient labels - Interprets equipment operating instructions - Interprets textual information obtained from a range of sources, and determines how content may be applied to advanced finishing
Writing	Maintains production records using required format, language and structure
Numeracy	- Identifies and comprehends ingredient quantities in recipes, dates on ingredient labels, temperature and timer settings and product dimensions - Estimates approximate quantities, and uses equipment to measure ingredient weights and volumes and product dimensions - Uses understanding of three-dimensional shapes to shape and portion products and check end-product shapes
Oral communication	Uses questioning techniques and active listening to confirm details, clarify responses and seek advice on finishing designs
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	- Plans, organises and implements tasks required to achieve production outcomes - Uses problem-solving skills to analyse product and process faults

Skill	Description
	and decide on appropriate action

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4005 Apply advanced finishing techniques for specialty cakes	FDFRB4005A Apply advanced finishing techniques for specialty cakes and desserts	Redesigned unit incorporating content from previous unit, excluding desserts	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4005 Apply advanced finishing techniques for specialty cakes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has designed and applied advanced finishing and decoration to two speciality cakes to reflect different client designs. One of the specialty cakes must be tiered. The cakes must include two of the following shapes:

- square or oblong
- oval or circle
- novelty shape.

The advanced finishing and decorating of the specialty cakes must:

- include two of the following decorations:
 - figurine
 - floral
 - specialty shapes
- use two of the following decorating mediums:
 - fondant icing
 - marzipan
 - chocolate paste, icing or glaze
 - butter cream
- incorporate the following processes:
 - masking
 - enrobing
 - piping
 - modelling.

The individual must produce a written report that demonstrates a design plan has been incorporated into one of the specialty cakes, including:

- product finishing requirements
- special decoration ingredients
- special equipment and process requirements
- design parameters, including colours, flavours, servings and quantity
- filling and decoration recipe specifications
- storage requirements
- shelf life specifications
- packaging and presentation instructions
- product costing and pricing.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- information resources to guide selection and implementation of cake decorating design and techniques
- ingredient characteristics, purpose and preparation requirements, including:
 - scope to substitute or vary ingredients in a recipe
 - the effect of ingredients on shelf life and food safety
 - the role, preparation requirements and uses of additives, including colours and flavours
- types and handling of bases, including:
 - fruit cake
 - mud cake
 - torte
 - sponges
- use and storage of decorating ingredients and materials, including:
 - fondant icing
 - marzipan
 - chocolate paste, icing or glaze
 - butter cream
 - syrups
 - flavoured sauces and toppings
 - cream
- finishing and decorating tools and techniques used to create decorative pieces and garnishes, including:
 - sugar flowers
 - cut shapes
 - moulded shapes
 - sculptures

- cake toppers
- content for design plans, including:
 - product finishing and decoration ingredient, equipment and process requirements
 - design parameters, including colours, flavours, servings and quantity
 - filling and decoration recipe specifications
 - storage requirements
 - shelf life specifications
 - packaging and presentation instructions
 - product costing and pricing
- optimum related sequencing and preparation requirements for cake decorations
- optimum conditions for use of finishings, including temperature and moisture content
- optimum storage conditions and the effect of refrigeration and freezing on finished product
- information to be provided to consumers as appropriate to product type and consistent with food safety requirements
- methods of estimating fixed and variable costs, and profit margin to determine sale price range
- work health and safety hazards and controls relating to work processes
- industry standard terminology applicable to advanced finishing.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - cake mixer and attachments
 - mixing bowls
 - piping bags and nozzles
 - measuring cups and spoons
 - cake decorating tools and equipment
 - personal protective clothing and equipment
 - documentation or technology for recording information
 - cleaning procedures, materials and equipment
 - ingredients that meet the product types required in the performance evidence
 - production costing information
 - cleaning procedures, materials and equipment
- specifications:
 - recipes that meet the product types required in the performance evidence
 - product design briefs

- relationships (internal and/or external):
 - supervisor
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4006 Coordinate baking operations

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to coordinate baking operations in a commercial baking environment.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work and limited responsibility for the output of others in a team. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan bakery production	1.1 Identify types and estimate volumes of baked products needed to meet production demand and customer special orders 1.2 Identify production processes, equipment and labour needed to

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	produce baked product types and production volumes 1.3 Select and collate master recipes to meet baked product types, and adjust to meet production volumes 1.4 Prepare preparation lists to specify pre-production requirements 1.5 Prepare production schedules to meet production volumes 1.6 Calculate and check availability of bakery supplies needed to meet baked product types and volumes, and order additional stock as required to meet bakery production supply needs
2. Monitor and control bakery production	2.1 Provide production schedules to bakery production staff for implementation 2.2 Confirm recipes used meet required baked product types 2.3 Monitor and address food safety risks to meet food safety standards 2.4 Monitor and address workplace health and safety risks to meet safety requirements 2.5 Monitor and control bakery work flow to maximise productivity 2.6 Monitor and control product and process parameters to meet end-product specifications, including the baked weight
3. Complete bakery production	3.1 Confirm bakery production, including customer special orders, meets scheduled product types, volumes and times 3.2 Confirm final product evaluations meet end-product specifications prior to product release for storage or sale 3.3 Confirm safe storage of baked products according to food safety standards and workplace procedures 3.4 Complete baking operations documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets key information in customer special orders, master recipes, stock control documents and end-product specifications
Writing	Prepares comprehensive and accessible baking operations documentation using structure, technical language and format appropriate for purpose and audience
Oral communication	Uses vocabulary relevant to role and context to convey and clarify information with suppliers and special order information with customers or bakery staff
Numeracy	- Extracts and interprets mathematical information embedded in baking operations texts, including customer special orders, master recipes, stock control documents and end-product specifications - Performs calculations to adjust recipes using baking formulas, and allows for wastage - Uses estimation to inform sequencing and timing of bakery production processes and products - Interprets measurement information to monitor and control bakery operations - Uses mathematical symbols and conventions to complete bakery operations documentation
Interact with others	Selects and uses appropriate communication techniques with bakery production staff to delegate work, discuss work requirements, implement process improvements and debrief on products and recipes
Navigate the world of work	- Complies with workplace health and safety and food safety regulatory requirements relevant to a commercial baking operation - Follows organisational policies and procedures relevant to own work role
Get the work done	Takes responsibility for identifying and addressing production work flow and product quality problems to optimise production efficiencies

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4006 Coordinate baking operations	FDFRB4002A Control bakery operations to meet quality and production	Redesigned unit based on previous unit	No equivalent unit

	requirements		

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4006 Coordinate baking operations

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has coordinated baking operations, including:

- coordinating at least one of the following four baking operations:
 - bread production process
 - cake production process
 - pastry production process
 - combination of any of the above three bakery production processes
- coordinating at least two of the following seven baked product ranges:
 - decorated products
 - post-bake decorated products
 - retarded yeast goods
 - frozen bakery goods
 - fresh baked bakery goods
 - packaged bakery goods
 - unpackaged bakery goods
- developing and documenting a production schedule that includes:
 - a logical sequence of bakery production processes
 - an accurate estimation of required ingredient and equipment resources to satisfy production volumes, allowing for 5% maximum product wastage
 - specification of the plant, labour and material inputs
 - specification of the finished products outputs
 - matching the required volume of production to the existing resources
- developing and documenting a preparation list, including consideration of:
 - pre-preparation of ingredients
 - pre-preparation of fillings

- pre-preparation of finishings
- pre-preparation of equipment
- calculating and ordering bakery supplies, including consideration of:
 - stock levels required for production
 - special agreements with suppliers of stock
 - stock delivery constraints
- preparing recipes for production, including:
 - master recipes adjusted for volume
 - processing requirements of the products
 - special considerations for time, temperature and special dietary needs
 - equipment required
- monitoring operations and addressing variations to ensure product specifications and production volumes are met.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- workplace health and safety requirements applicable to coordinating bakery operations
- regulatory requirements for food safety applicable to coordinating bakery operations
- the stages and work flow requirements of bakery production processes for:
 - decorated products
 - post-bake decorated products
 - retarded yeast products
 - frozen bakery products
 - fresh baked bakery products
 - packaged bakery products
 - unpackaged bakery products
- principles of production scheduling, including:
 - logical sequence of work
 - time constraints of products and processes
 - specification of the plant, labour and material inputs
 - specification of the finished products outputs
 - allowing for wastage
 - estimating ingredient requirements for production
 - equipment output volumes
 - labour requirements for production
 - scheduling production to finish products after cooling in time for delivery and sale
 - matching the required volume of production to the existing resources
- pre-production requirements for baking operations, including:

- types of fillings that need to be prepared prior to production
- types of finishings required for a bakery production
- content and layout of master recipes and how to adjust for volume
- production reporting methods used in bakeries
- indicators of the quality baked products, including:
 - baked colour
 - crumb and internal textures
 - consistency
 - moisture content
 - mouth feel and eating properties
 - shape
 - taste
 - texture
 - baked weight
- bakery operations standard terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or an environment that accurately represents workplace conditions
 - commercial resources, equipment and materials suitable for the production of the bakery products required in the performance evidence
- specifications:
 - master recipes that meet the product types required in the performance evidence
 - end-product specifications that meet the product types required in the performance evidence
- relationships (internal and/or external):
 - suppliers
 - bakery production staff
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4007 Assess and evaluate bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to evaluate the quality of baked bread products.

This unit is applicable to a commercial baking environment, particularly during product testing, confirming the quality of developed products and judging products for a baking competition or for commercial positioning. It can be applied to a specific bakery product range and should be customised to the quality standards of that product range.

This unit applies to individuals who apply a broad range of specialised knowledge and skills with responsibility for their own work. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria

<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine methodology for evaluating bread product quality	1.1 Define product and identify product class 1.2 Research and identify standards relevant to product class 1.3 Review product class standards and select product quality criteria 1.4 Select evaluation methodology to ensure standardised evaluation approach
2. Assess bread product	2.1 Assess product volume and appearance against standards 2.2 Assess product characteristics, including texture, aroma, colour and taste against standards 2.3 Assess technical difficulty and originality of product against standards 2.4 Document assessment findings according to workplace procedures
3. Complete bread evaluation	3.1 Use assessment findings to rate product characteristics against product quality criteria 3.2 Identify common product problems and determine their causes 3.3 Review ratings to determine product strengths and weaknesses against the standards 3.4 Document evaluation according to workplace procedures
4. Make bread product comparisons and recommendations	4.1 Compare product with other products of its class 4.2 Interpret findings to make recommendations for quality rating and commercial positioning of product 4.3 Make recommendations for product improvement according to findings

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets textual information obtained from a range of sources and determines how content may be applied to product evaluation
Writing	Integrates information from a number of sources to develop evaluation criteria and methodology

Skill	Description
	Prepares assessment reports using technical baking terminology and clear, logical language
Oral communication	Uses questioning techniques and active listening to confirm details, clarify responses and seek advice
Navigate the world of work	Independently keeps up-to-date with baking product knowledge and quality standards
Get the work done	Plans, organises and implements tasks required to achieve required outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4007 Assess and evaluate bread products	FDFRB4007A Evaluate and assess bakery product	Redesigned unit with a focus on bread products, incorporating content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4007 Assess and evaluate bread products

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has assessed and evaluated three of the following bread products:

- sweet product
- fibre product
- rye product
- meal product
- savoury product
- basic bread product
- sour bread product
- specialty bread product
- decorative bread product.

The evaluation and assessment of the three product varieties must be benchmarked against at least three other products of the same variety to produce comparative findings and qualitative judgements. The individual must also have researched two different baking industry sources and selected suitable product quality criteria to make the assessment and evaluations.

The bread products to be assessed and evaluated must include:

- three of the following product finishes:
 - baked finished product
 - post-baked finished product
 - dusted product
 - seed product
 - decorative finished product

- glaze finished product
- cream or iced finished product
- sweet finished product
- at least two of the following shapes:
 - condensed
 - roll
 - baton
 - sandwich
 - loaf/Vienna
 - high top
 - parcel
 - baguette
 - novelty shape.

In assessing and evaluating one bread product, the individual must create a written report that includes each of the following categories:

- appearance, including:
 - symmetry, uniformity and volume
 - presentation and cleanliness
 - crumb character
 - baked or fried colour
 - general character
- texture, including:
 - crumb cell size
 - gas cell structure
 - feel and softness
 - crumb stability
 - moisture of product
- aroma, including:
 - freshness
 - fermentation aromas as required by product
 - aroma suitability to product type
- flavour, including:
 - suitability of product variety
 - freshness
 - sweetness according to flavour variety required
 - levels of salt according to flavour variety required
 - quality of ingredients.

The evaluation and assessment report must also include the following considerations:

- storage stability and shelf life
- product cost compared to product quality
- suitability of packaging against the product variety
- technical difficulty
- product originality
- appearance
- volume
- problems or faults with the product and their causes
- an overall numerical score and descriptive rating of the product
- a recommendation on the commercial positioning of the product compared to competitor products.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- techniques used to assess and evaluate bread products, including:
 - sweet product
 - fibre product
 - rye product
 - meal product
 - savoury product
 - basic bread product
 - sour bread product
 - specialty bread product
 - decorative bread product
- fermented bread product finishes, including:
 - baked finishes
 - seeding and dusting product
 - decorative finishes
 - glazed finishes
 - cream or iced finishes
 - sweet finishes
- fermented product characteristics, including:
 - internal and external appearances
 - internal and external textures
 - internal and external aromas
 - internal and external flavours
- other bread product features and considerations, including:
 - storage stability and shelf life

- product cost compared to product quality
- packaging against the product variety
- technical difficulty
- product originality
- volume
- common problems or faults and their causes
- technical bakery science terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or a food evaluation venue, or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - bakery products for evaluation
 - bakery products from the same class for comparison
 - equipment for conducting tests
 - documentation or technology for recording information
 - workplace procedures for evaluating and assessing products
- specifications:
 - industry recognised bakery product standards
- relationships (internal and/or external):
 - bakery representatives
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPRBK4008 Apply bread baking science

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Application

This unit of competency describes the skills and knowledge required to apply technical knowledge and principles of bread processing and ingredient sciences in the production of bread products in a commercial bakery. It includes the reactions of baking ingredients during mixing, processing and baking.

This unit applies to individuals who apply a broad range of specialised knowledge and skills to their own work. They take responsibility for bakery production, testing and problem-solving.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory food safety, and work health and safety, regulations and legislation that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Retail baking (RBK)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Analyse aspects of	1.1 Read and interpret a Certificate of Analysis for breadmaking flour

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
ingredients on finished bread products	1.2 Identify the impact of ingredients on final products, and consider these impacts when selecting, measuring and using ingredients 1.3 Identify processes and techniques used in the manufacture of ingredients, and how these impact on ingredient characteristics 1.4 Identify types of food additives used in bread products, their functions and the likely reactions they may cause when combined with other ingredients 1.5 Identify the properties and reactions of sugars, proteins and fats, and their tracking points during baking production processes 1.6 Identify the properties of common emulsions, suspensions and solutions, and their impacts on the finished product, when selecting ingredients 1.7 Recognise common chemical and physical reactions, and factors required to cause a reaction, to control impact on the finished product 1.8 Apply knowledge of ingredients, interactions and baking processes to predict product shelf life of finished product
2. Analyse aspects of ingredient variations and changes in processing	2.1 Identify the role and science of fermentation in bread products and apply process variations to achieve different outcomes 2.2 Examine the features and benefits of different ingredient changes and interactions during fermentation
3. Manage variations in baking processes	3.1 Identify the role and science of mixing ingredients in bakery products and apply process variations to achieve different outcomes 3.2 Identify the role and science of retardation in bakery products and apply process variations to achieve different outcomes 3.3 Identify the role and science of freezing in bakery products and apply process variations to achieve different outcomes 3.4 Identify the impact of temperature, moisture and time on production and product outcome in management of operations 3.5 Identify the impacts of varying baking processes on production and product outcome in production planning and management 3.6 Select and manage baking processes to maximise production efficiencies 3.7 Identify and address production problems in process variations

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Learning	Undertakes independent research and experimentation and reflects on performance to build own knowledge and skills of food and bread baking science making methods
Reading	Sources, interprets and analyses baking science information from a range of technical food industry texts
Writing	Prepares reports on baking experiments, process and product specifications, using food scientific and technical language and formats appropriate to purpose
Numeracy	- Extracts and interprets mathematical information embedded in technical baking industry texts - Performs calculations and uses baking product formulas to interpret, adapt and adjust baking product processes - Uses mathematical symbols and conventions relevant to the baking industry to document experiment outcomes, recipes, and process and product specifications
Get the work done	- Uses problem-solving skills to analyse and evaluate bakery production ideas, processes and experiments, and decide on appropriate action - Takes responsibility for planning, organising and implementing tasks required to achieve required outcomes

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPRBK4008 Apply bread baking science	FDFRB4003A Apply baking science to work practices	Redesigned unit with a focus on bread products, incorporating content from previous unit	No equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPRBK4008 Apply bread baking science

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0

Performance Evidence

An individual demonstrating competency in this unit must satisfy all of the elements and performance criteria of this unit.

There must be evidence that the individual has explored baking science through processing two of the following bread product varieties:

- white/bakers flour product
- low protein flour product
- rye flour product
- meal flour product
- grain flour product.

For each the two bakery product varieties, the individual must have explored:

- the chemical and physical changes during the processing and mixing, including:
 - undermixing protein development using low intensity mixing
 - overmixing protein development using high intensity mixing
 - baking of undermixed dough to record volume and baked colour against a uniform standard dough
 - baking of overmixed dough to record volume, pan flow and baked colour against a uniform standard dough
 - recording the change in extension of gluten or window testing of fermentation doughs between undermixed dough and overmixed dough against a uniform standard dough
- liquid washing of bread doughs, including:
 - baking of protein balls to record volume and baked colour against protein level
 - measuring baked and cut protein balls to record crumb strength and texture
- adjusting the salt levels lower in a bread dough product to record the acceptable levels of both dough maturity and bread flavour, including:
 - mixing tolerance changes in reduced salt doughs
 - flavour tolerance changes in reduced salt doughs

- mixing time changes in delayed salt method doughs
- liquid hydration of reduced salt doughs
- adjusting and recording yeast levels in bread doughs to counteract the effect of sugar on fermentation doughs, including:
 - raising the percentage of yeast to percentage of sugar in the dough between 5% up until 15% sugar
 - comparing the rises in yeast levels against the processing times of a uniform standard bread dough based on 2% sugar
 - recording the change in hydration levels against the change in sugar levels
 - recording the change in salt levels against the change in sugar and yeast levels.

The individual must record the changes in the overall processing times of production of the two different bread dough types, including different protein and sugar levels. The individual must record the changes in processing times using two different varieties of bread improver, including the:

- overall processing time changes in fermented product
- finished baked product internal characteristics
- external baked product characteristics
- volume differences against a uniform standard product.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the chemical and physical changes during the processing and mixing of bread dough products
- mixing bread doughs, including:
 - energy inputs of different mixing systems, including high energy and low energy mixing
 - the effects of energy on mixing fermented dough, and how it affects gluten development
 - the effects of energy on mixing fermented dough, and how it affects baked qualities
- liquid washing of bread doughs, including how the protein level affects:
 - the baked quality of protein balls
 - the internal structure of baked protein balls
- the effects of altering the salt levels in bread doughs, including changes in:
 - dough tolerance during mixing
 - fermentation and flavour
 - mixing times
 - processing and fermentation times
- the effects of altering the yeast levels in doughs to counteract the effect of sugar or fat on bread doughs, including changes in:

- yeast levels to counter-affect the quantity of sugar and fat levels
- hydration levels to counter-affect the quantity of sugar or fat levels
- salt levels to counter-affect the quantity of sugar or fat levels
- the characteristics of different varieties of bread improver and their effects, including:
 - processing changes
 - finished baked product internal characteristics
 - external baked product characteristics
 - baked volume differences
- the cause-and-effect relationship on bread production processes of the following:
 - mixing and fermentation changes
 - changes of yeast levels
 - changes of salt levels
 - changes of protein levels
 - changes of sugar levels
 - changes of hydration levels
- dough rheology and bread baking science considerations, including:
 - the basic structures and properties of sugars, proteins and fats
 - common chemical reactions
 - common physical reactions
 - physical dough testing
 - panary aeration
- the content and purpose of a Certificate of Analysis for a commercial grade bread making flour, including the detailed analyses and how these affect bread production, including:
 - protein percentage
 - moisture percentage
 - water absorption percentage
 - extensograph height in Brabender Units (BU)
 - extensograph length in centimetre square (CMS)
 - falling number
 - development time in minutes
- food and bakery science terminology.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a commercial bakery or laboratory, or an environment that accurately represents workplace conditions
 - access to the internet
- resources, equipment and materials:

- relevant trade magazines and published articles
- commercial Certificate of Analysis
- equipment and ingredients relevant to the product and process types specified in the performance evidence
- bread science measuring equipment to meet the requirements of the performance evidence
- specifications:
 - access to the Food Standards Code
 - bread recipes and specifications
- timeframes:
 - according to work requirements.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPWHS1001 Identify safe work practices

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to recognise known workplace hazards and identify work health and safety requirements and procedures relating to work activities.

The unit applies to individuals who are new entrants to the food industry and work alongside a supervisor in most situations, exercising limited autonomy within established and well known parameters.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Work health and safety (WHS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Recognise work health and safety requirements	1.1 Identify work health and safety legislative requirements applicable to the workplace roles and activities 1.2 Identify duty of care requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Identify and explain own responsibilities to comply with safe working practices
2. Identify workplace hazards and control measures	2.1 Identify basic principles of risk management 2.2 Recognise common workplace hazards 2.3 Identify measures for controlling risks according to workplace policies and procedures 2.4 Identify requirements for the selection and use of relevant personal protective equipment 2.5 Interpret safety signs and symbols 2.6 Recognise workplace procedures for reporting hazards and risks
3. Identify work health and safety communication and reporting requirements	3.1 Identify participative arrangements for work health and safety, including communication processes, information and documentation requirements 3.2 Identify designated work health and safety roles and relevant authorities for raising work health and safety concerns, including concerns relating to the right to refuse unsafe work
4. Recognise work health and safety incident and emergency response procedures	4.1 Identify workplace procedures for responding to incidents, injuries and emergencies 4.2 Identify workplace procedures for first aid 4.3 Locate fire safety equipment and emergency evacuation procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interprets workplace health and safety information from a variety of sources to identify and apply relevant information
Writing	Uses clear language and correct concepts and terminology to ensure clarity of meaning when communicating workplace health and safety issues

Skill	Description
Oral Communication	• Uses clear language and concepts, and tone and pace appropriate for the audience and purpose when communicating workplace health and safety issues
Navigate the world of work	• Recognises organisational expectations and follows explicit protocols and procedures • Identifies and accepts responsibility for working within workplace frameworks • Seeks clarification of policies and procedures when required
Interact with others	• Responds to clear requests and contributes to health and safety discussions when invited to do so, asking relevant questions as appropriate
Get the work done	• Follows clearly defined instructions and sequencing, and monitors own progress for the task, and seeks assistance when necessary • Makes low-impact decisions around immediate clearly defined tasks • Responds to highly obvious routine health and safety problems using instruction and procedures

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPWHS1001 Identify safe work practices	FDFOHS1001A Work safely	Updated to meet Standards for Training Packages Changes to Performance Criteria to align with competency standards Change to title to reflect intent of unit	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPWHS1001 Identify safe work practices

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion:

- identified work health and safety legislative requirements applicable to own work
- interpreted the meaning of safety signs and symbols
- identified personal and protective equipment requirements
- identified the basic principles of risk management, and control measures used in the workplace
- recognised workplace hazards, incidents and injuries, and explained workplace procedures for reporting them
- explained own work health and safety rights and responsibilities in the workplace
- identified emergency procedures.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- applicable commonwealth, state or territory work health and safety legislation, regulations, standards, codes of practice and industry standards/guidance notes relevant to own work, role and responsibilities
- basic principles of risk management and assessment relating to work role
- common known workplace hazards
- potential consequences of failing to follow safe work practices
- common workplace safety signage and their meanings
- general workplace emergency response and evacuation procedures
- work activities which require licences, tickets or certificates of competency
- general first aid response requirements
- workplace procedures for raising work health and safety issues

- workplace procedures for reporting work health and safety hazards, accidents, incidents, emergencies, injuries, near misses and dangerous occurrences
- workplace procedures for responding to hazards, incidents and injuries
- general workers compensation and injury management requirements
- work health and safety hierarchy of controls
- work health and safety responsibilities and rights of duty holders, including persons in control of work/projects, employers and self-employed persons, supervisors, designers, manufacturers and suppliers, workers and inspectors
- own rights and responsibilities to comply with safe working practices, relating to identification of hazards, preventing bullying or harassment, use of amenities, smoking, use of drugs and alcohol and housekeeping
- role of work health and safety committees and representatives
- types of common personal protective equipment and fire safety equipment
- types of work health and safety information and documentation.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or environment that accurately represents workplace conditions
- resources, equipment and materials:
 - relevant reporting forms and other safety information
- specifications:
 - workplace health and safety policies and procedures
 - workplace health and safety legislation, regulations and codes of practice
- relationships (internal and/or external):
 - supervisor or senior personnel.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPWHS4001 Identify, assess and control work health and safety risk in own work

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to identify and address risks associated with a product or system of work, and develop and implement risk control measures to ensure workplace safety.

The unit applies to individuals who are technicians or specialists working with a systematic approach for health and safety with access to work health and safety specialist advice. Work typically involves addressing risk to ensure their own safety, as well as that of others who may be affected by their work.

All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Work health and safety (WHS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1 Identify hazards and assess risk associated with a product or system of work	1.1 Map production processes of the product or system of work 1.2 Identify hazards at each stage of the production processes 1.3 Systematically analyse hazards to identify risk of injury, illness or damage arising from the hazard 1.4 Identify factors contributing to the risk 1.5 Assess and evaluate the product or system of work against requirements of relevant work health and safety legislation, standards, codes of practice/compliance codes or guidance material 1.6 Consult potential users of the product or system of work
2 Control the risk of a product or system of work	2.1 Develop risk controls based on the hierarchy of control 2.2 Design fail-safe action into the product or system of work where there is a high consequence work health and safety risk, to minimise the impact of possible failure or defect 2.3 Monitor product or work system development as it evolves to identify new hazards and to manage any developing risk 2.4 Use a risk register to document residual risk and recommend actions to minimise risk 2.5 Communicate the risk management process and resultant risk register to those who may use or interact with the product or system of work 2.6 Document hazard identification, risk assessment and risk control processes, and make available to those who may be affected
3 Identify and record hazards and assess risks in own work	3.1 Identify and access sources of work health and safety information 3.2 Identify and eliminate hazards, and report residual risk according to workplace procedures 3.3 Use a risk register to document residual risk and actions to minimise risk, based on the hierarchy of control
4 Control risk in own work	4.1 Check work practices follow documented work procedures 4.2 Ensure work planning and conduct takes account of residual risk register 4.3 Identify, address and/or report deficiencies in risk controls 4.4 Maintain work health and safety records as required 4.5 Recognise personal professional limitations and seek expert advice

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	as required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Critically analyses documentation from a variety of sources and records and consolidates information to determine work health and safety requirements
Writing	- Prepares and produces models and associated documents that convey complex relationships between risks and controls - Develops procedural material for a specific audience, using clear and detailed language in order to convey explicit information and requirements
Oral communication	Uses collaborative and inclusive techniques, including active listening and questioning, and reading of verbal and non-verbal signals to convey and clarify information, and to confirm understanding on aspects of safety
Learning	Accepts new learning challenges by reflecting on personal limitations and seeking out advice
Navigate the world of work	- Ensures knowledge of legislative requirements is kept up-to-date in order to provide accurate information - Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements - Seeks to improve policies and procedures to better meet organisational goals
Interact with others	- Recognises the diversity in people and manages this diversity to improve workplace relations and practices - Collaborates with others sharing information to build strong work groups and avoid behaviours that are not conducive to a safe environment
Get the work done	- Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes - Applies systematic and analytical decision-making processes for

Skill	Description
	complex and non-routine situations Contributes to continuous improvement of current work practices by applying basic principles of analytical and lateral thinking

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPWHS4001 Identify, assess and control work health and safety risk in own work	FDFOHS4001A Identify, assess and control OHS risk in own work	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity Minor change to title to reflect current industry terminology	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPWHS4001 Identify, assess and control work health and safety risk in own work

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has, on at least one occasion:

- accessed, interpreted and applied work health and safety information, including work health and safety legislation, guidance material and benchmarks
- communicated with potential users of the product or system of work, other technicians/specialists, managers and expert advisers
- conducted risk assessments and analysed effectiveness of control measures
- analysed work systems and monitored safety performance
- assessed compliance with work health and safety legislation or procedures
- developed and maintained work health and safety records
- recognised and developed personal work health and safety expertise.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the difference between hazards and risks
- sources of work health and safety information both internal and external to the organisation
- nature of common workplace hazards, including chemicals, noise, manual handling work postures, underfoot hazards and moving parts of equipment
- regulatory requirements relevant to the particular industry/type of work site
- requirements for hazard identification and hazard identification processes
- principles of risk management, including risk analysis
- examples of safety benchmarks
- the hierarchy of control and its application
- principles of 'safe design' processes

- work health and safety legislative requirements for record keeping and reporting
- personal protective equipment requirements, including selection, use, storage and maintenance
- workplace specific information, including:
 - in-depth knowledge of hazards of the particular work environment and how they cause harm
 - hazard identification procedures relevant to the hazards in their workplace
 - work procedures
- organisation procedures related to work health and safety, including:
 - hazard, incident and injury reporting
 - hazard identification, risk assessment and control
 - consultation and participation
 - incident investigation
 - record keeping
- the legal rights and responsibilities of the workplace parties in relation to work health and safety.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- specifications:
 - work health and safety legislation, regulations and codes of practice
 - relevant workplace policies and procedures
- relationships (internal and/or external):
 - additional external expertise for advice
 - teams and/or committees for developing work health and safety procedures.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPWHS5001 Manage work health and safety processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Application

This unit of competency describes the skills and knowledge required to manage the ongoing implementation of work health and safety procedures and processes.

This unit applies to individuals who manage a small organisation, several work groups or a larger group within an organisation. Work is likely to have a focus on maintaining already established processes and the unit assumes that work health and safety advice and expertise is available.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Unit Sector

Work health and safety (WHS)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Manage work health and safety information and records	1.1 Identify and access relevant work health and safety legislation, standards, codes of practice/compliance codes, guidance material and other sources of work health and safety information and evaluate their relevance to the specific work context 1.2 Collect and collate information on work health and safety requirements, trends and risk controls and provide to others

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.3 Review records and record keeping processes to ensure that legal requirements for work health and safety record keeping are identified and addressed 1.4 Implement and monitor processes for ensuring that work health and safety records are accurately completed, collected and stored in accordance with legal requirements and workplace procedures
2. Manage work health and safety participative processes	2.1 Monitor participative processes to ensure compliance with legislative requirements and organisation procedures 2.2 Evaluate information provided to employees to ensure it is in a readily accessible and understandable format 2.3 Implement and monitor processes for ensuring that workgroup members have an opportunity, either directly or through their representative, to contribute to decisions that may affect their health and safety 2.4 Evaluate processes for addressing work health and safety issues to ensure issues raised through consultation are resolved promptly and in line with organisation procedures and legislative requirements 2.5 Provide prompt information about the outcomes of consultation to employees in a format and medium that is readily accessible
3. Manage work health and safety risk management processes	3.1 Ensure hazard, incident, and injury reporting and investigation processes are in place to meet legislative requirements and to inform future prevention strategies 3.2 Ensure processes are in place so that hazard identification and risk assessments occur according to organisation procedures 3.3 Ensure risk controls and hazard specific procedures are consistent with the hierarchy of control and are monitored to support compliance with legislative and regulatory requirements 3.4 Ensure processes are in place to identify and address any work health and safety implications of either proposed or implemented changes to the workplace, work processes or organisation of work 3.5 Recognise limits of own professional expertise and consult expert advisors as required
4. Manage work health and safety training program	4.1 Assess work health and safety training needs of workgroup members, taking into account legislative and regulatory requirements, internal policies and procedures, existing skills of work group members and risk control requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	4.2 Implement and monitor training programs to ensure identified work health and safety training requirements are addressed 4.3 Implement and monitor processes to ensure that all new employees receive work health and safety induction 4.4 Access and consult relevant work health and safety and training specialists as required in the development and implementation of the training program
5. Manage work health and safety continuous improvement process	5.1 Obtain and consider input from individuals and workgroup in identifying and implementing work health and safety improvement 5.2 Determine work health and safety priorities in consultation with appropriate managers and stakeholders 5.3 Develop work health and safety action plans, taking priorities and training needs into account 5.4 Monitor and update achievements against the work health and safety plans accordingly

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Comprehends, interprets and synthesises complex information from a range of sources
Writing	Presents information using vocabulary and format suitable for the task
Oral communication	- Presents ideas and information choosing appropriate vocabulary for purpose and audience - Uses questioning and active listening to seek opinions or information and to clarify understanding
Navigate the world of work	Monitors adherence to legal and regulatory responsibilities for self and others in relation to work health and safety requirements
Interact with others	Chooses appropriate communication methods to present

Skill	Description
	information to a range of individuals
Get the work done	• Develops plans to manage relatively complex tasks with an awareness of how they contribute to the organisation • Applies problem solving techniques to address complex work health and safety issues

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPWHS5001 Manage work health and safety processes	FDFOHS5001A Manage OHS processes	Updated to meet Standards for Training Packages Minor changes to Performance Criteria for clarity Minor change to title to reflect current industry terminology	Equivalent unit

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPWHS5001 Manage work health and safety processes

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has completed all steps in managing the work health and safety process in at least one workplace context, including:

- accessing and interpreting work health and safety information, including legislation, guidance material and benchmarks
- monitoring a record keeping process for compliance with legal requirements for work health and safety
- communicating work health and safety information to others using a range of media and formats
- managing effective work health and safety consultation and participation processes including development, implementation, monitoring and review, in consultation with others
- managing work health and safety risk management processes
- implementing a risk management approach to developing solutions to complex work health and safety problems, utilising information from a range of sources
- applying an action planning process
- assessing policies and procedures for compliance with work health and safety legislation
- managing workplace information and records to ensure all are current and accurate
- facilitating participatory consultative processes
- evaluating work processes for collecting and providing information
- determining support and training needs of work group
- implementing and monitoring training programs
- evaluate and monitor risk management processes
- managing a continuous improvement process.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- the difference between hazard and risk
- sources of work health and safety information both internal and external to the workplace
- understanding of work health and safety legislation and regulatory requirements relevant to the particular industry/type of work site
- the roles and responsibilities of employees, supervisors and managers in the workplace
- legislative requirements for consultation
- legal and practical requirements for work health and safety training
- legal requirements for work health and safety record keeping and reporting
- guidance material, including codes of practice/compliance codes relevant to the particular industry/type of work site
- risk assessment process, including:
 - hazard identification procedures
 - principles of risk assessment
 - the hierarchy of control and its application
 - legislative requirements for record keeping and reporting
- systems for identifying skill needs, such as:
 - performance reviews
 - training needs analysis
 - identifying additional training needs of learners
- workplace specific information, including:
 - hazards of the particular work environment and how they cause harm
 - hazard identification procedures relevant to the hazards in their workplace
 - designated person for raising work health and safety issues
- organisation procedures related to work health and safety, including hazard, incident and injury reporting, hazard identification, risk assessment and control, consultation and participation, incident investigation and record keeping
- awards and enterprise agreements that impact on the particular workplace
- the characteristics and composition of the workforce and how they may impact on the management of work health and safety.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - a workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - sample documents and forms appropriate for recording and reporting work health and safety issues

- sample emergency procedures and related resources
- specifications:
 - work health and safety legislation, regulations and codes of practice
 - workplace policies and procedures for work health and safety
- relationships (internal and/or external):
 - experts in work health and safety for advice and direction.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volumes, including Implementation Guides, are available at VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FDFBP3002A Operate the labelling process

Modification History

This unit supersedes and is equivalent to FDFBPLPB Operate the labelling process.

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to set up, operate and shut down a range of semi-automated and automated equipment involved in the labelling process.

Application of the Unit

Application of the unit	This unit has application in a wine operations bottling and packing environment. It typically targets the worker responsible for applying basic operating principles to the operation and monitoring of a labelling process and associated equipment.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency. Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to operate labelling equipment	1.1 Product and materials are confirmed and available to meet labelling requirements 1.2 Product and materials are prepared to meet labelling requirements 1.3 Services are confirmed as available and ready for operation 1.4 Equipment is prepared and checked to confirm readiness for use 1.5 Equipment is set to meet labelling requirements
2. Operate and monitor the labelling process	2.1 Labelling equipment is started up according to workplace procedures 2.2 Control points are monitored to confirm performance is maintained within specification 2.3 Bottles are labelled according to specification 2.4 Labelling equipment is monitored to confirm operating condition 2.5 Out-of-specification products, process and equipment performance is identified, rectified and/or reported
3. Shut down the labelling process	3.1 Labelling equipment is shut down according to workplace procedures 3.2 Labelling equipment is prepared for cleaning 3.3 Waste generated by both the process and cleaning procedures is collected, treated and disposed of, or recycled according to workplace procedures 3.4 Work is conducted in accordance with workplace environmental guidelines
4. Record information	4.1 Workplace information is recorded in appropriate format

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- access workplace information to identify labelling requirements
- select, fit and use appropriate personal protective clothing and/or equipment
- confirm supply of necessary materials and services. This may include:
 - checking labelling materials meet workplace specifications
 - checking bottles meet size and type specification and quality and hygiene standards
 - confirming compressed air, water and power are available to equipment
- liaise with other work areas, which may include:
 - maintenance personnel
 - quality assurance personnel
 - materials supply
 - bottle supply operators
 - bottle filling operators
 - bottle sealing operators
 - bottle capsuling operators
 - administration or marketing
- prepare product and materials. This may include:
 - heating glue to correct temperature
 - checking glue meets specification according to label type
 - confirming dryness of bottles in readiness for labels
 - check labels meet specification of product eg alcohol content
 - inserting labels, correctly orientated in magazine
 - feeding label web through application mechanism
- confirm equipment status and condition. This may include completing a test run and checking:
 - alignment of bottle feed screws and stars
 - alignment of label pick up and application components
 - out-feed components are aligned correctly and will not damage label
 - label alignment, orientation and height meet specifications
 - timing and alignment of web feed and bottle feed
 - any related coders are correctly set up and operational

REQUIRED SKILLS AND KNOWLEDGE

- set up and start up the process
- monitor the process and equipment operation to identify out-of-specification results or non-compliance. This can involve monitoring:
 - label adhesion
 - label orientation
 - label damage
 - label positioning
 - smooth versus bubbled labels
 - misprinted labels
 - any label or bottle coding applied as part of the process
- monitor supply and flow of materials to and from the process
- take corrective action in response to out-of-specification results or non-compliance
- report and/or record corrective action as instructed
- sort, collect, treat, recycle or dispose of waste
- shut down equipment in response to an emergency situation
- shut down equipment in response to routine shutdown requirements. This may include removing product or consumables from the line
- prepare equipment for cleaning. This may involve draining and/or dismantling equipment, and removing waste either manually or by rinsing, in preparation for cleaning and sanitation
- record workplace information
- maintain work area to meet housekeeping standards
- clean and sanitise equipment according to enterprise procedures
- take samples according to enterprise procedures
- conduct tests according to enterprise procedures
- carry out routine maintenance according to enterprise procedures
- identify, rectify and/or report environmental non-compliance according to enterprise procedures
- use oral communication skills/language to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge includes:

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- purpose and principles of labelling equipment
- key features of labelling equipment and components

REQUIRED SKILLS AND KNOWLEDGE

- links to related processes
- stages and changes which occur during the process
- effect of process stages on end product
- quality characteristics of end product
- product and materials preparation requirements and effect of variation on the process. This may include effect on end results of:
 - glue temperature
 - glue type
 - wet bottles
 - faulty label feed
 - incorrect or inaccurate labels
- emergency and troubleshooting procedures
- process specification, procedures and operating parameters
- equipment and instrumentation components, purpose and operation
- basic operating principles of process control systems where relevant
- services required
- significance and method of monitoring control points within the process
- common causes of variation and corrective action required
- routine maintenance requirements
- Occupational Health and Safety (OHS) hazards and controls
- lock-out and tag-out procedures
- procedures and responsibility for reporting problems
- environmental issues and controls
- shutdown sequence
- shutdown and cleaning requirements associated with changeovers and types of shutdown
- waste handling requirements and procedures
- recording requirements and procedures
- cleaning and sanitation procedures where relevant
- sampling procedures where relevant
- testing procedures where relevant
- routine maintenance procedures where relevant

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • conduct pre-start checks on machinery used for labelling • start, operate, monitor and adjust process equipment to achieve required quality outcomes • take corrective action in response to typical faults and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment as required • work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required • products and materials as required • internal and external customers and suppliers as required • cleaning procedures, materials and equipment as required • documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with other units of

EVIDENCE GUIDE	
	competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with workplace procedures, licensing requirements and legislative requirements
Workplace information	Workplace information can include: • Standard Operating Procedures (SOPs) • specifications • production schedules or instructions • work notes • Material Safety Data Sheets (MSDS) • manufacturer instructions • verbal direction from manager, supervisor or senior operator
Equipment	Equipment may include: • wet gum labellers • pressure sensitive labellers • neck taggers
Product and materials	Product and materials include: • filled bottles • labels • glue

RANGE STATEMENT	
	• neck ties • additional promotional dress
Equipment status	Confirming equipment status involves: • checking that hygiene and sanitation standards, safety standards and pre-start requirements are met and that equipment is operational • checking operation or calibration of measuring instrumentation
Services	Services may include: • power • compressed air • water
Monitoring the process	Monitoring the process may involve: • the use of production data, such as performance control charts
Process operation and monitoring functions	Process operation and monitoring functions may be: • manual or involve the use of a process control system
Control points	Control points refer to those key points in a work process that must be monitored and controlled. These include: • food safety (critical) • quality and regulatory control points • inspection points
Information systems	Information systems may be: • print or screen based

Unit Sector(s)

Unit sector	Wine operations

Custom Content Section

Not applicable.

FDFFS2001A Implement the food safety program and procedures

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to maintain personal hygiene and conduct food handling, housekeeping and waste disposal related to work tasks and responsibilities where work involves operation of production and/or packaging equipment and processes.

Application of the Unit

Application of the unit	This unit is based on and equivalent to the guideline food safety unit GFSMFSRA Apply and monitor food safety requirements. Note that this unit does not apply to the pharmaceutical industry. Refer to FDFPH2001A Apply Good Manufacturing Practice procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Implement the food safety program	1.1. Food handling requirements are identified 1.2. Food handling is carried out according to the food safety program 1.3. Food safety hazards are controlled as required by the food safety program 1.4. Where food safety control requirements are not met, the incident is promptly reported and corrective action is taken 1.5. Food safety information is recorded to meet requirements of the food safety program 1.6. The workplace is maintained in a clean and tidy order to meet workplace standards 1.7. Work is conducted in accordance with workplace environmental guidelines
2. Participate in maintaining and improving food safety	2.1. Work area, materials, equipment and product are routinely monitored to ensure compliance with food safety requirements 2.2. Processes, practices or conditions which could result in a food safety breach are identified and reported according to workplace reporting requirements 2.3. Corrective action is taken in accordance with the food safety program 2.4. Food safety issues are raised with designated

ELEMENT	PERFORMANCE CRITERIA
	personnel
3. Comply with personal hygiene standards	3.1. Personal hygiene meets the requirements of the food safety program 3.2. Health conditions and/or illness are reported as required by the food safety program 3.3. Clothing and footwear worn is appropriate for the food handling task and meets the requirements of the food safety program 3.4. Movement around the workplace complies with the food safety program

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- locate and follow workplace information relating to food safety responsibilities
- follow workplace procedures to maintain food safety as required by the food safety program relating to own work
- monitor food safety hazards as required by the food safety program, including methods such as visual inspection, sampling and testing
- record results of monitoring, and maintain records as required by the food safety program
- identify and report situations that do not meet the requirements of the food safety program and/or could result in unsafe food
- take corrective action as required by food safety program within level of responsibility
- handle, clean and store equipment, utensils, packaging materials and similar items according to the requirements of the food safety program as required by work role
- maintain personal hygiene consistent with the food safety program
- take necessary precautions when moving around the workplace and/or from one task to another to maintain food safety
- wear and maintain appropriate clothing/footwear as required by work tasks and consistent with the requirements of the food safety program
- report health conditions and illness as appropriate according to the food safety program
- handle and dispose of out-of-specification or contaminated food, waste and

recyclable material according to food safety program as this requirement relates to own work responsibility

- maintain the work area in a clean and tidy state
- identify and report signs of pest infestation
- record food safety information in appropriate format
- clean and sanitise equipment according to enterprise procedures
- collect samples and conduct tests according to the food safety program according to enterprise procedures
- participate in investigating food safety breaches according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- sources of information and expertise on procedures and responsibilities for food safety relating to own work
- basic concepts of HACCP-based food safety, including identification of hazards that are likely to occur, establishing appropriate methods of control and confirming that controls are met
- food safety management arrangements in the workplace, including awareness of food safety legislation, workplace policies and procedures to implement responsibilities, understanding the relationship between the quality system and food safety program, personnel responsible for developing and implementing the food safety program, the role of internal and external auditors as appropriate, procedures followed to investigate contamination events, and performance improvement processes
- awareness of common microbiological, physical and chemical hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences and control methods to prevent occurrence
- basic understanding of the properties, handling and storage requirements of ingredients, materials and products handled and used
- suitable standard for materials, measuring devices, equipment and utensils used in the work area
- food safety requirements related to work responsibilities, including personal hygiene, requirements and procedures to report illness and safe food handling practices for own work
- methods used to monitor that food safety is under control, including the purpose of sampling and taking measurements, such as temperature and pH, and conducting inspections and tests
- action required in the event of non-compliance (corrective action is typically described in the food safety program and/or related workplace information)
- purpose of keeping records and the recording requirements of the food safety

program

- methods used in the workplace to isolate or quarantine food which may be unsafe
- product and ingredient traceability procedures, such as product recall where required by work responsibilities
- clothing and footwear requirements for working in and/or moving between food handling areas
- personal clothing maintenance, laundering and storage requirements
- appropriate bandages and dressings to be used when undertaking food handling
- housekeeping requirements and responsibilities relating to own work, and use and storage of housekeeping/cleaning equipment where relevant
- procedures to follow in the event of pest sighting or discovery of infestation
- purpose and importance of cleaning and sanitation procedures
- waste collection, recycling and handling procedures relevant to own work responsibilities
- cleaning and sanitation procedures where relevant
- impact of rework handling/addition on food safety where relevant
- sampling and test methods where relevant

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Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify own responsibilities with regard to food safety
- identify food safety risks in the workplace and the control measures used to manage them
- apply control measures in own work
- monitor compliance with food safety standards
- identify and act on non-compliances and participate in improving safety
- maintain required standards of personal hygiene
- complete workplace records as required

EVIDENCE GUIDE	
	• apply safe work practices and identify OHS hazards and controls • apply food safety procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • food safety information relating to the workplace, including a food safety program outlining food safety hazards and control methods. It may also include company policies, procedures and codes of practice, such as: • Good Manufacturing Practice (GMP) • related work instructions and procedures • work tasks and responsibilities • appropriate clothing and related apparatus • reporting and monitoring systems • cleaning and sanitation policies and procedures as required • sampling and test procedures and related equipment as required.
Method of assessment	This unit should be assessed together with other units of competence relevant to the function or work role. Examples could be: • FDFOP2004A Clean and sanitise equipment • FDFOP2013A Apply sampling procedures • FDFOP2063A Apply quality systems and procedures • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised

RANGE STATEMENT	
wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
A food safety program	A food safety program is a written document that specifies how a business will control all food safety hazards that may be reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Workplace information	Workplace information may be provided in: • food safety program • standard operating procedures (SOPs) • specifications • log sheets • written or verbal instruction
Food handling	Food handling refers to: • food receipt and storage • food preparation • cooking, holding, cooling, chilling and reheating • packaging, disposal
Products/materials handled and stored	Products/materials handled and stored can include: • raw materials • ingredients • consumables • part-processed product • finished product • cleaning materials
Examples of a breach of food safety procedures	Examples of a breach of food safety procedures could include: • failure to check delivery temperatures of potentially hazardous chilled food

RANGE STATEMENT	
	• failure to place temperature-sensitive food in temperature controlled storage conditions promptly • failure to wash hands when required • use of cloths for unsuitable purposes
Responsibility for monitoring food safety	Responsibility for monitoring food safety, identifying breaches in food safety procedures and taking corrective action relates to own tasks and responsibilities and occurs in the context of the food safety program in the workplace
Monitoring	Monitoring describes the methods used to confirm that a food safety hazard is in control, such as: • taking temperatures • collecting samples • conducting visual inspections • conducting other tests as required
Food safety hazard	A food safety hazard is a biological, chemical or physical agent in, or condition of, food that has the potential to cause an adverse health effect
Hygiene requirements	Minimum personal hygiene requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in the Food Safety Standard 3.2.2, Division 4:14 and/or state or territory legislation/regulations
Reporting of health conditions and illnesses requirements	Reporting of health conditions and illnesses requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in Food Safety Standard 3.2.2, Division 4:13 and/or state or territory legislation/regulations
Appropriate clothing and footwear	Appropriate clothing and footwear depends on work requirements. It should be designed to ensure that the body and clothing itself does not contaminate food or surfaces likely to come into contact with food. Examples of clothing designed to prevent contamination by the body include: • purpose designed overalls or uniforms • hair-nets

RANGE STATEMENT

	• beard snoods • gloves • overshoes

Unit Sector(s)

Unit sector	Food safety

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFFS3001A Monitor the implementation of quality and food safety programs

Modification History

November 2011: minor typographical error corrected.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to provide a leadership role in supporting day-to-day implementation of the food safety/quality programs in a work area. It also involves supporting others to implement the requirements of the food safety/quality procedures.

Application of the Unit

Application of the unit	This unit applies to those with formal responsibility for others, and to those required to model workplace policies and procedures but who have no formal management role. This unit is based on and equivalent to the guideline food safety unit GFSOFSA Oversee the day-to-day implementation of food safety in the workplace. Note that this unit does not apply to the pharmaceutical industry. Refer to FDFPH3001A Monitor and maintain Good Manufacturing Practice procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

Prerequisite units		
	FDFFS2001A	Implement the food safety program and procedures

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Ensure others in the work area are able to meet quality and food safety requirements	1.1.Hazard control and clothing and equipment appropriate to work requirements are available, functional and correctly fitted 1.2.Information on food safety/quality responsibilities and procedures is current, accessible and communicated to others in the work area 1.3.Information about identified hazards and the outcomes of risk assessment and risk control procedures is accessible and communicated to others in the work area 1.4.Food safety/quality hazards and control measures used in the work area can be identified by those in the work area 1.5.Mentoring and coaching support is available to support individuals/groups to implement quality and

ELEMENT	PERFORMANCE CRITERIA
	safe food handling procedures 1.6.Training needs are identified and addressed within level of responsibility
2. Monitor observance of quality standards and food safety programs in the work area	2.1.Work procedures in the work area are clearly defined, documented and followed 2.2.Deviation from identified procedures is identified, reported and addressed within level of responsibility 2.3.Personal behaviour is consistent with workplace policies and procedures that support food safety and quality 2.4.Food safety and/or quality hazards are identified and reported according to workplace procedures 2.5.Food safety and quality information is recorded to meet workplace reporting requirements 2.6.The work area is maintained according to housekeeping standards 2.7.Work is conducted in accordance with workplace environmental guidelines
3. Take corrective action in response to quality and food safety non-compliance	3.1.Workplace procedures for responding to quality and food safety non-compliance are promptly implemented 3.2.Hazardous events are investigated to identify cause 3.3.Control measures to prevent recurrence and minimise risks of hazardous events are implemented
4. Maintain and improve quality and food safety in the work area	4.1.Processes or conditions which could result in a breach of food safety procedures or quality specifications are identified, assessed, removed or and/reported within level of responsibility and according to workplace procedure 4.2.Risk assessments are conducted and appropriate control measures are identified and implemented in the work area 4.3.Recommendations arising from risk assessments are implemented within level of responsibility 4.4.Inadequacies in control measures are identified and reported according to company reporting requirements 4.5.Matters raised relating to quality/food safety are promptly resolved and/or referred to appropriate personnel 4.6.The work group is consulted and advised of

ELEMENT	PERFORMANCE CRITERIA
	quality/food safety matters relevant to work role 4.7. Opportunities for improving food safety and quality are identified and raised with relevant personnel 4.8. Procedures are developed or revised to support effective control of quality and food safety hazards 4.9. Quality/food safety records are reviewed to ensure they are complete and meet the quality system, food safety program and legal requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access, interpret and communicate information about the food safety program, quality requirements and related procedures to others in the work area
- demonstrate two-way communication, including active listening and responding constructively to feedback
- provide access to and maintain current food safety/quality documentation
- model safe food handling and quality practices and procedures to achieve required outcomes, including demonstrating:
 - work procedures that meet the requirements of quality and food safety
 - cleaning and sanitising equipment
 - sampling and testing as appropriate according to quality and food safety requirements
 - maintaining personal hygiene
 - wearing appropriate clothing and footwear as required by the work task
 - following procedures when moving within and between work areas
 - reporting health conditions and illnesses according to workplace procedures
 - handling, cleaning and storing equipment, utensils and packaging materials as appropriate
- identify control points in the work area and demonstrate monitoring techniques used (control points include critical, quality and regulatory control points)
- support others to meet quality standards and follow food safety procedures by ensuring that all personnel in the work area receive the information required and have the necessary skills and equipment to carry out their responsibilities

REQUIRED SKILLS AND KNOWLEDGE

- identify, report and/or address food safety/quality non-compliance in an appropriate and timely manner within level of responsibility
- determine when and how to make adjustments to maintain output within level of responsibility
- identify, report and/or address food safety/quality training and development needs of others in the work area
- ensure that appropriate and timely action is taken in response to non-compliance
- handle and dispose of out-of-specification or contaminated food, waste and recyclable material according to food safety program as this requirement relates to own work responsibility
- participate in investigations of non-compliance and risk assessment processes
- participate in consultation processes to improve quality and food safety outcomes in the workplace
- review practice and procedures to implement recommendations arising from risk assessments and/or improvement proposals within level of responsibility, such as collecting and analysing food safety/quality records, reviewing operating procedures and communicating changes to others in the work area
- ensure that housekeeping standards are maintained and that equipment is in operational order, such as participating in the management of equipment calibration
- monitor the recording of quality and food safety information to confirm that records accurately reflect performance and meet the requirements of the food safety and quality programs
- participate in food recall procedures as required, within level of responsibility
- facilitate consultation processes according to enterprise procedures
- lead investigations of quality and food safety incidents according to enterprise procedures
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- sources of information and expertise on procedures and responsibilities for food safety relevant to the workplace
- principles of a HACCP-based approach to managing food safety, including identifying hazards that are likely to occur, establishing appropriate methods of control and confirming that controls are met
- basic concepts of quality assurance including hazards, risk assessment and control methods
- company programs and systems in place to manage and support quality and food safety in the workplace, which may involve separate or integrated programs, including systems for maintaining and updating documents, such as operating procedures and specifications
- clothing and footwear requirements for working in and/or moving between food

REQUIRED SKILLS AND KNOWLEDGE

handling areas, including personal clothing maintenance, laundering and storage requirements

- appropriate bandages and dressings to be used when undertaking food handling
- housekeeping requirements and responsibilities relating to own work, where relevant this includes use and storage of housekeeping/cleaning equipment
- procedures to follow in the event of pest sighting or discovery of infestation
- purpose and importance of cleaning and sanitation procedures
- legal obligations for food safety and quality, including an awareness of government legislation and customer requirements
- food safety and quality responsibilities and requirements relating to the work area
- awareness of common micro biological, physical and chemical hazards related to the foods handled in the work area, including the types of hazards likely to occur, the conditions under which they occur, possible consequences and control methods to prevent occurrence
- suitable standard for materials, measuring devices, equipment and utensils used in the work area
- properties of food and ingredients used that affect food safety, including an understanding of related storage, processing and handling requirements
- current technical and process knowledge required to participate in investigations of food safety/quality hazards, risks and incidents within level of responsibility, including an understanding of common micro biological, physical and chemical hazards, related control methods and the way changes in equipment and/or processing methods can affect food safety and quality outcomes
- procedures for identifying unsafe and/or non-conforming product, including control points and evidence of out-of-specification product or materials
- sampling procedures, test methods and inspections
- options for responding to non-compliance, including legal responsibility, risk management and cost/implications of different responses and level of responsibility for decision making
- methods used in the workplace to isolate or quarantine food which may be unsafe
- waste collection, recycling, handling and disposal, including handling/disposal requirements for different types of waste, such as hazardous waste where relevant
- traceability and recall procedures within level of responsibility
- documentation system and procedures, including record keeping to meet both company and legal requirements, procedures for developing and/or reviewing workplace procedures, and document control systems used in the workplace
- auditing arrangements, roles and responsibilities as they relate to own work responsibilities, such as internal and external audit processes
- appropriate communication skills and techniques to convey information on quality and food safety requirements to others in the workplace
- cleaning and sanitation procedures where relevant
- impact of rework handling/addition on food safety where relevant
- sampling and test methods where relevant

REQUIRED SKILLS AND KNOWLEDGE

- facilitation and consultation techniques where relevant

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- describe quality and food safety program, risks and control measures of the work area
- confirm that control measures are in place and that personnel in the work area are equipped and informed to implement programs
- identify, address and follow up on non-compliances
- identify causes of non compliances
- conduct risk assessments and recommend responsive action
- provide support to others to implement the programs
- complete and maintain documentation.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- food safety program for the work area which identifies critical control points, control measures and corrective action
- quality policy, system and procedures
- work area or system in which quality and food safety practices and procedures are to be monitored
- personal protective clothing and equipment as required
- review/audit arrangements
- reporting and monitoring systems.

EVIDENCE GUIDE	
Method of assessment	This unit should be assessed together with other units of competence relevant to the function or work role. Examples could be: • FDFPPL3001A Participate in improvement processes • FDFPPL3004A Lead work teams and groups • BSBRES401A Analyse and present research information.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Work responsibilities	Work responsibilities may include formal or informal responsibility for modelling appropriate quality/food safety policies and procedures and providing a support role to others in the work area
Food safety program	A food safety program is a written document that specifies how a business will control all food safety hazards that may be reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the food safety standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures

RANGE STATEMENT	
Quality systems	Quality systems may be externally accredited, such as an ISO system, or internally designed and managed
Workplace information	Workplace information may be provided in: • food safety and quality policies and programs • standard operating procedures (SOPs) • specifications • log sheets • written or verbal instruction incorporating food safety and quality requirements
Incidents	A food safety incident is: • a situation where the safe limits or parameters identified by the food safety program are not met A quality incident is: • a situation where the quality limits or parameters identified in specifications or processing instructions are not met
Monitoring	Monitoring describes the methods used to confirm that a food safety or quality hazard is in control, such as: • taking temperatures • collecting samples • conducting visual inspections • additional testing as required
Responsibility for identifying breaches of food safety procedures	Responsibility for identifying breaches of food safety procedures and taking corrective action occurs in the context of the food safety program and within scope of responsibility
Responsibility for identifying non-compliance against quality standards	Responsibility for identifying non-compliance against quality standards occurs within the context of defined standards or specifications and relates to work area
Personal hygiene requirements	Minimum personal hygiene requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in the Food Safety Standard 3.2.2, Division 4:14 and/or state or territory

RANGE STATEMENT	
	legislation/regulations
Reporting of health conditions and illnesses	Reporting of health conditions and illnesses requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in Food Safety Standard 3.2.2, Division 4:13 and/or state or territory legislation/regulations
Operator responsibilities	The operator at this level may not have direct responsibility for overseeing the training/development of team members. At a minimum they must be able to identify development needs of others in the work area and refer this information to the relevant personnel. The operator at this level may not have responsibility for independently assessing risks and determining the effectiveness of control measures. However, they would be expected to observe day-to-day effectiveness and participate in assessment and review processes. Responsibilities at this level may include facilitating consultation processes within level of responsibility
Record keeping	Record keeping complies with customer, legal and food safety program requirements

Unit Sector(s)

Unit sector	Food safety

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFFS4001A Supervise and maintain a food safety plan

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit of competency covers the skills and knowledge required to maintain and implement a hazard analysis critical control point (HACCP)-based food safety plan. It includes the ability to monitor the implementation of a food safety plan, to revise, verify and validate the system, and to respond to audit findings for the system.

Application of the Unit

Food safety is critical to public health and safety and the successful operation of food processing businesses. This unit is suitable for managers, supervisors and team leaders in food processing establishments who are responsible for maintaining the food safety plan or system in a designated work area.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Review the existing food safety plan	1.1 Data and results from HACCP records are collected to verify the food safety system 1.2 Major and minor non-conformances to the HACCP plan are identified 1.3 Critical control points are monitored to confirm performance 1.4 Problem areas are analysed using appropriate quality improvement tools and techniques 1.5 Corrective actions and strategies are suggested to prevent recurrence of the problem 1.6 Required amendments to the HACCP plan are documented 1.7 Recommendations are reported and presented to appropriate personnel
2. Communicate the requirements of the food safety plan	2.1 Food safety principles, food safety procedures and requirements, including regulatory requirements, are explained to the team 2.2 Commitment to, and responsibility for, food safety is developed through work team communication 2.3 Procedures to support the food safety plan are defined, documented and put in place 2.4 Training and mentoring is provided to the team to assist implementation
3. Monitor the implementation of the food safety plan	3.1 Team implementation of the food safety plan is monitored 3.2 Personal behaviour, including hygiene, housekeeping and use of clothing and equipment, is monitored and corrected, where necessary 3.3 Records and reports are completed accurately and on schedule 3.4 Prompt action is taken to correct non-conformance according to enterprise and regulatory requirements 3.5 Causes of non-conformance are identified and analysed 3.6 Control measures are implemented to prevent future non-conformance 3.7 Non-conformance is reported according to enterprise requirements
4. Maintain the food safety plan	4.1 Feedback is sought from all personnel to identify potential hazards, corrective actions and controls 4.2 Processes or conditions which could result in breaches of food safety procedures are identified and preventive or corrective action is taken 4.3 Corrective action and control procedures are updated to improve food safety

ELEMENT	PERFORMANCE CRITERIA
	4.4 Documentation is completed according to enterprise and regulatory requirements

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- collect, monitor and interpret data to identify trends and non-conformance
- communicate with a range of stakeholders, including customers, to convey food safety requirements and programs
- demonstrate current technical and process knowledge for the control of hazards and improvement of the food safety system
- demonstrate enterprise monitoring procedures, including sampling, testing and required records and documents, and explain their purpose
- determine and take corrective action where food safety is potentially compromised
- communicate food safety requirements to the team
- facilitate food safety risk assessment procedures
- apply HACCP principles in leading the process for developing a food safety plan
- communicate the regulatory requirements that apply to the enterprise's food safety plan
- develop enterprise standard operating procedures (SOPs) and communicate their role in the food safety system
- review operations and practices for food safety improvement
- lead personnel/team in investigation of food safety incidents and potential incidents
- maintain currency of knowledge through independent research or professional development
- monitor records and documentation for accuracy and conformance
- respond to food safety incidents and implement food recall procedures, as required
- review communication systems (spoken and written) to minimise the potential for misreporting and misunderstanding of food safety requirements, procedures and plans
- take action to improve own work practice as a result of self-evaluation, feedback from others or in response to changed work practices or technology
- use a range of communication and team building strategies to gain team commitment to food safety
- use detailed product knowledge, including product characteristics and the requirements for safe preparation, processing, storage, handling and display, to monitor food safety
- utilise problem-solving strategies required in investigating non-conformance and reviewing the food safety system
- model safe food handling and quality practices and procedures to demonstrate required

work practices and provide leadership, including demonstrating:

- work procedures that meet the requirements of quality and food safety
- cleaning and sanitising equipment
- sampling and testing, as appropriate, according to quality and food safety requirements
- maintaining personal hygiene
- wearing appropriate clothing and footwear as required by the work task
- following procedures when moving within and between work areas
- reporting health conditions and illnesses according to workplace procedures
- handling, cleaning and storing equipment, utensils and packaging materials, as appropriate.

Required knowledge includes:**Knowledge of:**

- current technical and process knowledge required to participate in investigations of food safety/quality hazards, risks and incidents
- common microbiological, physical and chemical hazards to food safety, and related control methods
- the way changes in equipment and/or processing methods can affect food safety hazards and level of risk
- the objectives of a HACCP-based food safety system
- the steps in the development of a HACCP-based food safety system
- the steps in the systematic introduction of a HACCP-based food safety system
- enterprise recall and traceability procedures
- purpose of the HACCP development and review process
- the document controls associated with a procedure change
- the purpose of SOPs and work instructions
- the process of auditing and verifying a HACCP-based food safety system.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to maintain and implement a HACCP-based food safety plan.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Critical aspects of assessment must include the following: • review a food safety plan for a food processing operation • communicate the requirements of a food safety plan to workers • demonstrate safe food handling work practices • complete records and reports related to the implementation of food safety • respond to non-compliances and take corrective action.
Context of and specific resources for assessment	Assessment of performance requirements in this unit should be undertaken within the context of food technology. Competency is demonstrated by performance of all stated criteria, including the critical aspects and knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statements applicable to the workplace environment. Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • a HACCP-based food safety plan for the food processing enterprise • methods and related software systems, as required, for collecting data, analysing data and compiling into a report.
Method of assessment	The following assessment methods are suggested: • written and/or oral questioning to assess knowledge and understanding • a report on the review of a HACCP-based food safety system • workplace evidence and third-party verification of participation in the maintenance and implementation of a HACCP-based food safety system • observation of candidate demonstrating work practices and workplace standards to maintain food safety • case studies • field reports.

Guidance information for assessment	Evidence should be gathered over a period of time in a range of actual or simulated environments.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Food safety program	A food safety program is a written document that specifies ‘...the systematic identification of hazard points, in the production, processing and sale of food and the implementation of risk avoidance, risk minimisation and risk management strategies in respect of these identified hazards.’ (National Food Authority 1994, p17). The food safety program and related procedures must comply with legal requirements of the Food Safety Standards and must be communicated to all food handlers. Where no food safety program is in place, food safety requirements may be specified in general operating procedures
Control points	Control points include: critical, quality and regulatory control points
Workplace information	Workplace information may be provided in: - food safety and quality policies and programs - standard operating procedures (SOPs) - specifications - log sheets - written or verbal instruction incorporating food safety and quality requirements
Incidents	A food safety incident: - is a situation where the safe limits or parameters identified by the food safety program are not met A quality incident: - is a situation where the quality limits or parameters identified in specifications or processing instructions are not met
Monitoring	Monitoring describes the methods used to confirm that a food safety or quality hazard is in control. Examples of monitoring procedures include: - taking temperatures - collecting samples - conducting visual inspections - testing, as required
Responsibility for identifying breaches of food safety procedures	Responsibility for identifying breaches of food safety procedures and taking corrective action: occurs in the context of the food safety program and within scope of responsibility
Responsibility for identifying non-compliance against quality	Responsibility for identifying non-compliance against quality standards:

standards	occurs within the context of defined standards or specifications and relates to work area
Personal hygiene requirements	Minimum personal hygiene requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in the Food Safety Standard 3.2.2, Division 4:14 and/or state/territory legislation/regulations
Reporting of health conditions and illnesses	Reporting of health conditions and illnesses requirements are specified by the food safety program. At a minimum this must meet legal requirements as set out in Food Safety Standard 3.2.2, Division 4:13 and/or state/territory legislation/regulations
Operator responsibilities	The operator at this level may have direct responsibility for overseeing the training/development of team members. The operator at this level may have some responsibility for independently assessing risks and determining the effectiveness of control measures. They would be expected to observe day-to-day effectiveness of the food safety plan and participate in assessment and review processes. Responsibilities at this level may include facilitating consultation processes
Record keeping	Record keeping complies with customer, legal and food safety program requirements
Verification of a food safety system	Verification refers to methods and procedures used to carry out monitoring, including: sampling and testing to provide evidence that the specifications set by food safety legislation and enterprise requirements continue to be met

Unit Sector(s)

Food safety.

FDFST4002A Monitor the development and implementation of a food QA system

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit covers the skills and knowledge required to develop and manage a HACCP-based Quality Assurance (QA) Program.

Application of the Unit

This unit applies to quality assurance and technical staff who have responsibility for developing and/or implementing a HACCP-based QA system in a food processing environment.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish the scope of the QA system	1.1 Enterprise needs and expectations in product quality are clearly defined 1.2 Existing systems and requirements are detailed for incorporation into the QA system 1.3 Scope of the HACCP-based quality system is defined to encompass production system and product requirements 1.4 System is directed to prevent and control identified hazards
2. Conduct hazard analysis and assessment	2.1 Every step in the production process is assessed for potential food safety hazards 2.2 Critical Control Points (CCPs) are established to identify where each significant hazard can be prevented or controlled 2.3 A measurable or recognisable standard is assigned for each CCP to define the critical limits 2.4 Critical limits are technically and scientifically validated
3. Ensure all documents, work procedures and processes required for the system are developed, available and in use	3.1 All products and processes covered by the QA system are described in a standardised format defining product characteristics relevant to food safety 3.2 Work instructions and Standard Operating Procedures (SOPs) are reviewed for accuracy, relevance and sufficiency to prevent hazards 3.3 Documented procedures for monitoring CCPs are implemented 3.4 Documented procedures which ensure any CCPs which are outside critical limits are brought back within limits, and affected product is suitably handled, are implemented 3.5 Documented procedures are implemented to ensure the QA system is regularly verified and audited as working effectively 3.6 Availability and data storage of all records and documents for the system is maintained
4. Respond to non-conforming product or processes	4.1 Procedures for taking corrective action are identified 4.2 Corrective and preventative measures are implemented to prevent recurrence. 4.3 Procedures are devised or revised to support control measures 4.3 Processes or conditions which could result in a breach of procedures are identified and corrective action is taken 4.4 Process changes are introduced and controlled so that quality assurance requirements are accomplished
5. Review product sampling and test results	5.1 Product sampling procedures are identified 5.2 Post collection procedures are identified according to SOPs 5.3 Test results are reviewed and responded to in accordance with

ELEMENT	PERFORMANCE CRITERIA
	workplace requirements
6. Audit, verify and validate the system	6.1 HACCP plans are routinely revised, verified and validated to reassess hazards, CCPs, critical limits, testing methods and all related procedures of the QA system to ensure they are appropriate to the enterprise requirements 6.2 Internal or external audit findings are followed up and acted upon 6.3 Reported quality hazards and non conformances are investigated and acted upon 6.4 The HACCP-based QA system is reviewed to take account of any process changes or product specifications

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- define the scope of the quality system and food safety system to ensure requirements are met
- apply the HACCP principles and the process for developing a quality assurance or food safety program
- conduct monitoring of a CCP
- determine and take corrective and preventative action
- apply workplace, regulatory and customer requirements critical to the workplace's operation and success
- identify critical limits for enterprise product or processes
- identify the actual and potential risks associated with uncontrolled changes in procedures
- interpret the resulting trends of product monitoring and testing
- interpret the results and trends of process monitoring
- monitor records and documentation for accuracy and compliance
- monitor the accurate and timely recording of quality data
- outline legal obligations of the enterprise and individuals for maintenance of the Quality Assurance system
- identify and apply relevant OH&S, regulatory and workplace requirements
- identify the documentation required to support a HACCP-based QA system
- record and analyse monitoring and verification data
- validate CCPs and critical limits
- identify and describe implementation of a change in the process
- identify causes of variation and non-conformance and explain appropriate course(s) of action

to rectify problems

- outline team requirements and team management processes or strategies
- prepare process and product status reports recommending changes to improve processes and procedures
- prepare reports using primary and summary data, and appropriate language
- review communication systems (spoken and written) to minimise the potential for misreporting and misunderstanding of food safety requirements, procedures and plans
- use relevant communication skills
- Utilise available technology to record, manipulate, analyse and present or report data
- apply appropriate mathematical concepts and measures
- assemble product and process inspection, test and other quality data in prescribed format.

Required knowledge includes:

Knowledge of:

- the steps in the development of a HACCP-based QA system
- the steps in the systematic introduction of a HACCP-based QA system
- enterprise recall and traceability procedures
- post collection procedures for handling samples
- purpose of the HACCP development and review process
- risks associated with samples and how they may be minimised
- the types of data the enterprise uses to record performance
- the document controls associated with a procedure change
- the purpose of calibrating equipment
- the purpose of SOPs and work instructions
- sampling procedures
- the process of auditing and verifying a HACCP-based QA system
- the objectives of a HACCP-based QA system
- the process for validating critical limits and CCPs
- the role of pre-requisite programs and Good Manufacturing Processes (GMPs) in a HACCP-based program.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to develop and manage a HACCP-based Quality Assurance (QA) Program.
Critical aspects for assessment and	Critical aspects of evidence that the candidate can

evidence required to demonstrate competency in this unit	monitor the development and implementation of a food QA system must include the following: • scoping the requirements for a QA system • analysing a production process to identify CCPs and establish critical limits • developing procedures for implementing and monitoring a QA system • maintaining data and documentation for a QA system • contributing to a review of a QA system, including verification and validation.
Context of and specific resources for assessment	Assessment of performance requirements in this unit should be undertaken within the context of food technology. Competency is demonstrated by performance of the processes specified, including the critical aspects and knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statements applicable to the workplace environment. Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • methods and related software systems as required for collecting data and calculating yields, efficiencies and material variances appropriate to production environment • tests used to report relevant product/process information and recorded results.
Method of assessment	The following assessment methods are suggested: • written and/or oral questioning to assess knowledge and understanding • the development of a HACCP-based quality system for a food product • a report on review of a HACCP-based quality production system • workplace evidence and third party verification of participation in the development and implementation of a HACCP-based QA system • Case studies • Field Reports.
Guidance information for assessment	Evidence should be gathered over a period of time in a range of actual or simulated environments.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Occupational health and safety requirements	- Codes of practice - Material Safety Data Sheets - Enterprise OHS policies, procedures and programs.
Regulations	- Australian and international standards including: - Australia New Zealand Food Standards Code - ISO Standards - codex alimentarius - industry guidelines and codes of practice - industry regulations - State food regulations.
Workplace requirements	- Enterprise QA policy, practices and procedures - Enterprise-specific procedures - SOPs Enterprise task requirements and work instructions.
Production system and product requirements	These may include food safety, product quality, regulatory compliance, animal welfare (if required) and preventative maintenance.
Verification of a QA system	Verification refers to methods and procedures used to carry out monitoring, including sampling and testing to provide evidence that the specifications set by relevant legislation and codes of practice continue to be met.
Validation of a QA system	Validation refers to obtaining evidence to confirm that a HACCP-based QA program is complete and effective and will deliver the expected outcomes.

Unit Sector(s)

Technical.

FDFST4003A Apply digital technology in food processing

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit covers the skills and knowledge required to develop and manage a HACCP-based Quality Assurance (QA) Program.

Application of the Unit

This unit applies to quality assurance and technical staff who have responsibility for developing and/or implementing a HACCP-based QA system in a food processing environment.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish the scope of the QA system	1.1 Enterprise needs and expectations in product quality are clearly defined 1.2 Existing systems and requirements are detailed for incorporation into the QA system 1.3 Scope of the HACCP-based quality system is defined to encompass production system and product requirements 1.4 System is directed to prevent and control identified hazards
2. Conduct hazard analysis and assessment	2.1 Every step in the production process is assessed for potential food safety hazards 2.2 Critical Control Points (CCPs) are established to identify where each significant hazard can be prevented or controlled 2.3 A measurable or recognisable standard is assigned for each CCP to define the critical limits 2.4 Critical limits are technically and scientifically validated
3. Ensure all documents, work procedures and processes required for the system are developed, available and in use	3.1 All products and processes covered by the QA system are described in a standardised format defining product characteristics relevant to food safety 3.2 Work instructions and Standard Operating Procedures (SOPs) are reviewed for accuracy, relevance and sufficiency to prevent hazards 3.3 Documented procedures for monitoring CCPs are implemented 3.4 Documented procedures which ensure any CCPs which are outside critical limits are brought back within limits, and affected product is suitably handled, are implemented 3.5 Documented procedures are implemented to ensure the QA system is regularly verified and audited as working effectively 3.6 Availability and data storage of all records and documents for the system is maintained
4. Respond to non-conforming product or processes	4.1 Procedures for taking corrective action are identified 4.2 Corrective and preventative measures are implemented to prevent recurrence 4.3 Procedures are devised or revised to support control measures 4.4 Processes or conditions which could result in a breach of procedures are identified and corrective action is taken 4.5 Process changes are introduced and controlled so that quality assurance requirements are accomplished
5. Review product sampling and test results	5.1 Product sampling procedures are identified 5.2 Post collection procedures are identified according to SOPs 5.3 Test results are reviewed and responded to in accordance with

ELEMENT	PERFORMANCE CRITERIA
	workplace requirements
6. Audit, verify and validate the system	6.1 HACCP plans are routinely revised, verified and validated to reassess hazards, CCPs, critical limits, testing methods and all related procedures of the QA system to ensure they are appropriate to the enterprise requirements 6.2 Internal or external audit findings are followed up and acted upon 6.3 Reported quality hazards and non conformances are investigated and acted upon 6.4 The HACCP-based QA system is reviewed to take account of any process changes or product specifications

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- define the scope of the quality system and food safety system to ensure requirements are met
- apply the HACCP principles and the process for developing a quality assurance or food safety program
- conduct monitoring of a CCP
- determine and take corrective and preventative action
- apply workplace, regulatory and customer requirements critical to the workplace's operation and success
- identify critical limits for enterprise product or processes
- identify the actual and potential risks associated with uncontrolled changes in procedures
- interpret the resulting trends of product monitoring and testing
- interpret the results and trends of process monitoring
- monitor records and documentation for accuracy and compliance
- monitor the accurate and timely recording of quality data
- outline legal obligations of the enterprise and individuals for maintenance of the Quality Assurance system
- identify and apply relevant OH&S, regulatory and workplace requirements
- identify the documentation required to support a HACCP-based QA system
- record and analyse monitoring and verification data
- validate CCPs and critical limits
- identify and describe implementation of a change in the process
- identify causes of variation and non-conformance and explain appropriate course(s) of action

to rectify problems

- outline team requirements and team management processes or strategies
- prepare process and product status reports recommending changes to improve processes and procedures
- prepare reports using primary and summary data, and appropriate language
- review communication systems (spoken and written) to minimise the potential for misreporting and misunderstanding of food safety requirements, procedures and plans
- use relevant communication skills
- Utilise available technology to record, manipulate, analyse and present or report data
- apply appropriate mathematical concepts and measures
- assemble product and process inspection, test and other quality data in prescribed formal.

Required knowledge includes:

Knowledge of:

- the steps in the development of a HACCP-based QA system
- the steps in the systematic introduction of a HACCP-based QA system
- enterprise recall and traceability procedures
- post collection procedures for handling samples
- purpose of the HACCP development and review process
- risks associated with samples and how they may be minimised
- the types of data the enterprise uses to record performance
- the document controls associated with a procedure change
- the purpose of calibrating equipment
- the purpose of SOPs and work instructions
- sampling procedures
- the process of auditing and verifying a HACCP-based QA system
- the objectives of a HACCP-based QA system
- the process for validating critical limits and CCPs
- the role of pre-requisite programs and Good Manufacturing Processes (GMPs) in a HACCP-based program.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to develop and manage a HACCP-based Quality Assurance (QA) Program.
Critical aspects for assessment and	Critical aspects of evidence that the candidate can

evidence required to demonstrate competency in this unit	monitor the development and implementation of a food QA system must include the following: • scoping the requirements for a QA system • analysing a production process to identify CCPs and establish critical limits • developing procedures for implementing and monitoring a QA system • maintaining data and documentation for a QA system • contributing to a review of a QA system, including verification and validation.
Context of and specific resources for assessment	Assessment of performance requirements in this unit should be undertaken within the context of food technology. Competency is demonstrated by performance of the processes specified, including the critical aspects and knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statements applicable to the workplace environment. Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • methods and related software systems as required for collecting data and calculating yields, efficiencies and material variances appropriate to production environment • tests used to report relevant product/process information and recorded results.
Method of assessment	The following assessment methods are suggested: • written and/or oral questioning to assess knowledge and understanding • the development of a HACCP-based quality system for a food product • a report on review of a HACCP-based quality production system • workplace evidence and third party verification of participation in the development and implementation of a HACCP-based QA system • Case studies • Field Reports.
Guidance information for assessment	Evidence should be gathered over a period of time in a range of actual or simulated environments.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Occupational health and safety requirements	- Codes of practice - Material Safety Data Sheets - Enterprise OHS policies, procedures and programs.
Regulations	- Australian and international standards including: - Australia New Zealand Food Standards Code - ISO Standards - codex alimentarius - industry guidelines and codes of practice - industry regulations - State food regulations.
Workplace requirements	- Enterprise QA policy, practices and procedures - Enterprise-specific procedures - SOPs Enterprise task requirements and work instructions
Production system and product requirements	These may include food safety, product quality, regulatory compliance, animal welfare (if required) and preventative maintenance.
Verification of a QA system	Verification refers to methods and procedures used to carry out monitoring, including sampling and testing to provide evidence that the specifications set by relevant legislation and codes of practice continue to be met.
Validation of a QA system	Validation refers to obtaining evidence to confirm that a HACCP-based QA program is complete and effective and will deliver the expected outcomes.

Unit Sector(s)

Technical.

FDFST4005A Document processes and procedures for a food product

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit covers the skills and knowledge required to document the operational steps and procedures in producing a processed food product.

Application of the Unit

This unit applies to quality assurance and technical staff who are required to document processes and procedures for a food product, and who have responsibility for monitoring and maintaining product safety and quality and the production environment.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify the stages and operations required in the processing of a food product	1.1 Inputs, production processes and outputs are identified 1.2 Each step in processing is examined and impacts, feedback and process adjustment in the production system is assessed 1.3 Hazards to food safety and product quality at each stage of production are identified
2. Identify the facilities, equipment, workflow and process controls for a processed food product	2.1 Functions of the major production stages are classified and analysed 2.2 Equipment used to perform each operation stage is identified 2.3 The facilities, workflow and layout of the workplaces, or technical work area, together with their core activities and links with other parts of the organisation are identified 2.4 Process controls are documented for a processed food product 2.5 The workforce structure and the roles and responsibilities of workplace personnel are established for a given food product 2.6 Information management processes are investigated for a food processing operation
3. Produce flow diagrams for nominated unit operations	3.1 Correct nomenclature and symbols are used to show processes, inputs and outputs 3.2 The completed flow diagram is reviewed and suggestions for improvements for product quality and operational efficiency are documented 3.3 Energy and resource usage, and environmental impacts, of production processes are quantified 3.4 Procedures for testing for yields and/or variances are identified at each stage 3.5 Areas for process improvement are identified for further analysis

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- identify major stages and operations, including: material transfer, separation, size reduction, combination, heat exchange, biochemical transformation, shaping and extrusion
- analyse the functions of the major operations, including purpose and application of each operation

- identify the range of equipment used to perform each major unit operation
- establish the function of each piece of equipment used to perform major operations
- review the resultant products of the major production operations on food, in accordance with quality control processes and procedures
- ascertain the affects of physical conditions e.g. temperature, pressure on the function of these unit operations
- prepare a process flow chart for each unit operations
- identify the process controls in place and how they ensure required production rate and consistent quality.

Required knowledge includes:

Knowledge of:

- the basic theory behind each major operation e.g. material transfer, separation, size reduction, combining, heat exchange, biochemical transformation and shaping
- selection criteria regarding the equipment used to perform each major operation
- the basic operating principles for the equipment used to perform each major operation
- process flow charts and process control.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to document processes in a production system as part of system monitoring and continuous improvement.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Critical aspects of assessment must include evidence of the ability to document procedures for a food product, including identifying unit operations and representing a food processing operation in a diagrammatic form. Documented procedures must be able to be interpreted to review mechanisms for calculating variances and outputs that are outside of specification, and to identify areas for further refining and development under continuous improvement for a food product.
Context of and specific resources for assessment	Assessment of performance requirements in this unit should be undertaken within the context of food technology. Competency is demonstrated by performance of all stated criteria, including the critical

	aspects and knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statements applicable to the workplace environment. Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • methods and related software systems as required for collecting data and calculating yields, efficiencies and material variances appropriate to production environment • tests used to report relevant product/process information and recorded results.
Method of assessment	The following assessment methods are suggested: • written and/or oral questioning to assess knowledge and understanding • completing workplace documentation • third party reports from experienced practitioner • case studies • field reports.
Guidance information for assessment	Evidence should be gathered over a period of time in a range of actual or simulated environments.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Occupational health and safety requirements	• Codes of practice, regulations, Material Safety Data Sheets (MSDSs) • Enterprise specific requirements • Relevant State/Territory/Commonwealth Occupational Health and Safety acts, regulations, national standards, codes of practice and guidance notes which may apply in jurisdiction • Examples of specific task related procedures may include: • handling of chemicals

	• use of personal protective equipment (PPEs).
Regulations	• Australian New Zealand Food Standards Code • AQIS • Local Authority standards • Symbols for process flow charts may be based on ISO 9000 Documentation, Quality Manual and 32 Operational Procedures (AQA ISO 9000 Series) • Acts of Parliament, regulations and statutes.
Materials, equipment and systems	• Heating and cooling equipment, size reduction systems, materials transfer equipment, heat exchangers, forming and shaping equipment • Major operations may include: material transfer, separation, size reduction, combining, heat exchange, biochemical transformation, shaping and extrusion operations. • Each operations may include preventative maintenance procedures.

Unit Sector(s)

Technical.

FDFST4007A Establish operational requirements for a food processing enterprise

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit covers the skills and knowledge required to review and report on operational requirements and issues in a food processing enterprise.

Application of the Unit

This unit applies to food technologists, quality and food safety supervisors, technical specialists, and to middle management personnel who are new to the industry. It includes gaining an understanding of the economic and political structure of the industry, production stages and methods and the key factors affecting food safety and quality, and reporting procedures. The person who undertakes this unit must be aware of the intent and detail of legislation and be able to review compliance procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify key issues and organisations that impact the Australian food processing industry	1.1 The range of job roles and responsibilities for a food processing operation are described 1.2 The environmental impacts of a food processing operation are determined 1.3 Impacts of customer expectations for product integrity, quality, safety and nutritional value on food processing operations are explained 1.4 The roles of key regulatory and industry bodies for a food processing sector are described
2. Identify the sequence of operations for processing a range of products in a sector	2.1 Procedures for the assembling and preparation of ingredients are implemented 2.2 The storage and handling requirements of ingredients for a food product are defined 2.3 A flow chart for the processing operations for a food product is constructed 2.4 Specifications for a food product are described and the methods used to ensure critical limits are complied with
3. Explain factors affecting food safety and product quality during processing	3.1 Key food safety issues in food processing are described 3.2 Food safety procedures are implemented and reviewed 3.3 Hygiene procedures for a food processing operation are applied 3.4 Factors affecting shelf life and spoilage in food products are explained 3.5 The nature and purpose of a product testing program is defined
4. Write and/or review standard operating procedures to comply with legislation relating to product and processing	4.1 Relevant legislation and regulations that apply to food production, packaging and labelling are identified 4.2 The purpose and scope of relevant legislation is defined 4.3 The roles and responsibilities of authorities responsible for administering legislation are identified 4.4 Operational and product requirements to comply with legislation are defined 4.5 A standard operating procedure is documented based on an organisation's templates and systems
5. Define organisational requirements to comply with legislation relating to food premises, equipment design and storage facilities	5.1 Legislation and regulations that apply to food premises, storage facilities and equipment are reviewed 5.2 The purpose and intent of relevant legislation is identified 5.3 The roles and responsibilities of authorities responsible for administering legislation are identified 5.4 Procedures to support compliance with legal requirements are

ELEMENT	PERFORMANCE CRITERIA
	established and/or reviewed
6. Provide written reports and presentations on food processing issues	6.1 Areas of noncompliance or with potential for process improvement are identified 6.2 Information is collected and problem solving strategies are used to review procedures 6.3 Data, discussion and recommendations are presented in a formatted report 6.4 Presentations which incorporate technical data and information are delivered

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- describe industry organisations and their role
- define job roles and responsibilities for the food processing industry
- define the ingredients, operations and product specifications for a food processing operation
- define the inputs and outputs of a food processing operation, including the use of non renewable resources and impacts on air, soil, water and atmospheric CO₂ levels
- identify the legal responsibilities of a food processing company. This includes responsibilities relating to:
 - product content (Food Standards Code)
 - product packaging and labelling, including use of nutritional information panels (Food Standards Code)
 - design requirements of food premises and equipment
 - requirements of storage facilities used for materials, ingredients and final product
 - other requirements as appropriate to the product and/or market (e.g. import and/or export legislation)
- identify and/or develop specifications and procedures to ensure that legal responsibilities related to product content and packaging are achieved
- inspect plant design to identify potential hazards that could be introduced as a result of equipment design and configuration. For example, overhead pipes or equipment where dust could collect and fall into food. Where hazards are identified, apply the hierarchy of control to identify opportunities to remove or control the risk
- identify storage facilities across a production site. Identify the dangerous goods stored on site and confirm that storage of these goods (type and quantity) meets legal requirements
- confirm that employees required to handle chemicals and dangerous goods are advised of the

associated risks, that this information is available in a form appropriate to the audience and that Material Safety Data Sheets are available

- develop and/or review recording systems to confirm compliance with legislative requirements and ensure that employees responsible for recording information are informed of these responsibilities
- establish internal review/audit procedures to confirm that legislative responsibilities are met
- within each area of legislation applying to the activities of a food processing facility, identify the relevant authority responsible for administering the legislation. Identify the rights and responsibilities of related officers to access the production site
- present technical information in a written format and as a presentation.

Required knowledge includes:

Knowledge of:

- industry organisations and representative bodies in food processing
- the environmental impacts of a food processing operation
- customer expectations and community perceptions of the food processing industry
- emerging technologies in food processing
- food testing methods
- procedures for QA and food safety
- legal responsibilities of a food processing company relating to product content and packaging
- the purpose and intent of relevant legislation
- potential hazards that could be introduced as a result of equipment design and configuration
- associated risks in handling chemicals and dangerous goods
- recording requirements to comply with legislative requirements
- recording procedures
- report templates and protocols
- oral and written communication strategies and protocols
- relevant authorities responsible for administering legislation and their roles

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competency in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	Candidates must be able to demonstrate the ability to establish and/or review procedures to support compliance and report on process improvement issues. Assessment must also include evidence of an understanding of: the role of industry organisations and job roles within the industry; systems, roles and procedures in place for food safety and QA; and legal requirements for the packing, production and labelling operations of a food production enterprise.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • workplace processes and procedures • workplace documentation including specifications and procedures • relevant legislation • communication systems • workplace information recording systems, requirements and procedures.
Method of assessment	The following assessment methods are suggested: • written and/or oral questioning to assess knowledge and understanding • completing workplace documentation • third party reports for the implementation of enterprise requirements for product safety and quality • case studies • field reports.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Legislation	Legislation to be covered by this unit includes: • Acts of Parliament, regulations and statutes • Australian New Zealand Food Standards Code • Food Safety legislation (including provisions covering the design of food premises and equipment) • Local Authority regulations • Customs and excise legislation (for alcohol-based ingredients/materials) • AQIS requirements • Dangerous goods legislation • Import and export legislation • Additional legislation as appropriate to product, process and market.
Industry and regulatory organisations	These may include industry funded marketing co-operatives, research and development organisations (RDOs), certification bodies, federal and state regulatory agencies for OHS, environment and food safety, the Australian Quarantine Inspection Service, export and third party auditors, and organisations sponsoring QA schemes.
Occupational health and safety requirements	• Codes of practice, regulations, Material Safety Data Sheets (MSDSs) • Enterprise specific requirements • Relevant State/Territory/Commonwealth Occupational Health and Safety acts, regulations, national standards, codes of practice and guidance notes which may apply in jurisdiction • Examples of specific task related procedures may include: • handling of chemicals • use of personal protective equipment (PPEs).
Materials, equipment and systems	• Heating and cooling equipment, size reduction systems, materials transfer equipment, heat exchangers, forming and shaping equipment • Major operations may include: material transfer, separation, size reduction, combining, heat exchange, biochemical transformation, shaping and extrusion operations • Operations includes all food processing and preventative maintenance.

Unit Sector(s)

Technical.

FDFST4012A Apply water management principles to the food industry

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

This unit covers the skills and knowledge required to monitor and manage water quality and usage in a food processing operation.

Application of the Unit

This unit applies to quality assurance and technical staff who have responsibility for maintaining product safety, quality and efficiency of food processing operations that use water as part of the food production processes. The unit does not apply to the management of water used in a plant for non food production purposes e.g. for cleaning, showers, gardens etc. Responsible management of water for these purposes is covered under MSAENV472A Implement and monitor environmentally sustainable work practices.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify the sources and quality of water available to food processing plants	1.1 Current and possible future sources and quality of raw water are identified 1.2 The water quality requirements for required food processing operations are identified 1.3 The suitability of water supplied from a range of sources, including water recycled from the food processing plant, is assessed 1.4 The consumption of non recycled water is assessed and a reduction strategy formulated
2. Identify raw water pre treatment processes	2.1 The steps involved in water purification are documented and data on quality for supplied water is obtained 2.2 Water disinfection methods and equipment for a range of food processing operations are identified and evaluated
3. Apply efficient and sustainable water management principles to the food processing industry	3.1 Opportunities for reducing water usage in the food processing operation is identified 3.2 Sources and characteristics of waste water generated across the food processing operation are identified 3.3 Methods for treating and recycling water for re-use in food processing operation are identified 3.4 Opportunities to reduce the volume of waste water and improve treatment methods are identified 3.5 Procedures for future water management are reviewed and critical limits set

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to

- assess the suitability of water supplied from a range of sources, and water recycled within the food processing plant
- identify the water quality requirements for a range of food processing operations
- map the steps involved in water purification at municipal water treatment plants
- identify water disinfection methods, suitable for a range of food processing operations
- appraise suitable systems and equipment for water disinfection in the food processing industry

- identify the sources and characteristics of waste water generated across food processing operations
- identify methods for treating and recycling water and minimising potable water consumption
- identify legal requirements for water discharge.

Required knowledge includes:**Knowledge of:**

- water quality requirements, including:
 - chemical specifications e.g. pH, Total Suspended Solids (TSS), Total Dissolved Solids (TDS), heavy metals
 - microbiological specifications eg. BOD, presence of Fecal coliform, bacteria, Cryptosporidium, Giardia
- water purification processes in general
- water disinfection methodologies and systems suitable for the food processing industry including chlorination, ozonation and UV irradiation
- waste water treatment (relevant to a food processing plant) including primary, secondary and tertiary waste water treatment stages
- waste stream characteristics and classification in relation to the food processing industry
- methods of reducing, reusing and recycling water in a food processing operation, e.g. implementation and routine monitoring of waste reduction practices, use of consumable, returnable, refillable or reusable packaging
- State legislation and local bylaws governing prescribed wastes
- legal requirements for water discharge
- regulations relating to the processing and disposal of food waste
- the major requirements contained in the environmental protection legislation, including State environmental regulatory certification procedures, permits and waste discharge agreements.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	A person who demonstrates competency in this unit must be able to implement and review water and waste procedures for a food processing operation.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Critical aspects of assessment must include evidence of the ability to assess water quality for use in food processing, monitor water usage for a food processing operation, integrate water quality monitoring into process planning, and implement and review water management

	procedures in food processing.
Context of and specific resources for assessment	Assessment of performance requirements in this unit should be undertaken within the context of food technology. Competency is demonstrated by performance of all stated criteria, including the critical aspects and knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statements applicable to the workplace environment. Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • methods and related software systems as required for collecting data and calculating yields, efficiencies and material variances appropriate to production environment • tests used to report relevant product/process information and recorded results.
Method of assessment	The following assessment methods are suggested: • observation of candidate conducting a range of tests and procedures • written and/or oral questioning to assess knowledge and understanding • completing workplace documentation • third party reports from experienced practitioner • case studies • field Reports.
Guidance information for assessment	Evidence should be gathered over a period of time in a range of actual or simulated environments.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Legislation

Legislation refers to any relevant Commonwealth and State Acts of Parliament, Statutes and Regulations

	including legislation and regulations covering: • the use of water for commercial and industrial use • environmental protection • waste generation and disposal • food standards and food safety • occupational health and safety.
Policies and procedures	• Codes of practice, e.g. Manual Handling and Small Wastewater Treatment Plants • Australian and international standards e.g. ISO14000.
Water sources	Water sources may include: • reticulated supply from water authorities • municipal treatment plants • bores • dams • rainwater tanks • recycled water.
Water quality requirements	Water quality requirements for food processing operations may include chemical, microbiological, physical and radiological specifications.
Treatment and disposal methods	Treatment and disposal may include on site storage and disposal; dilution; specifying/controlling discharge rates; recycle and reuse options; on site pre-treatment.
Waste management documentation	Waste management documentation may include information on applicable trade waste laws or other requirements; complaint records; training records; process information, process operation log book; inspection, maintenance and calibration records; relevant contractor and supplier information; incident reports. Information on emergency preparedness and response, records of significant trade waste impacts; audit results; management reviews; trade waste charging policy; industrial trade waste generators register.

Unit Sector(s)

Technical.

FDFOHS2001A Participate in OHS processes

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency specifies the workplace performance required for an entry level employee to participate in occupational health and safety (OHS) processes in the workplace, in order to ensure their own health and safety at work, as well as that of those in the workplace who may be affected by their actions.

Application of the Unit

Application of the unit	This unit is intended for application during induction of new entrants to the workplace and where worker has basic operational knowledge and skills for a limited range of tasks and problems. IT includes apprentices, trainees and casual workers. Application of this unit should be contextualised to reflect any specific workplace risks, hazards and associated safety practices.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare to work safely	1.1. Hazards in the work area are identified and action taken to control risks for those hazards the employee can correct 1.2. Hazards and inadequacies in control measures the employee cannot correct are reported in accordance with organisation procedures 1.3. Pre-start checks are carried out as required according to work procedures
2. Conduct work safely	2.1. Personal protective equipment is used correctly and maintained when required 2.2. Work procedures and workplace instructions for ensuring safety are followed when planning and conducting work 2.3. Incidents and injuries to are reported to designated personnel 2.4. OHS housekeeping is undertaken in work area
3. Participate in OHS consultative activities	3.1. Knowledge of roles and responsibilities of OHS representatives and OHS committees is applied 3.2. Constructive contribution to workplace meetings, workplace inspections or other OHS consultative

ELEMENT	PERFORMANCE CRITERIA
	activities is made 3.3.OHS issues are raised with designated personnel according to organisation procedures 3.4.Input to improve workplace OHS systems and processes is provided to eliminate hazards or reduce risk according to organisation procedures,
4. Follow emergency response procedures	4.1.Emergency situations are identified and reported 4.2.Organisation procedures for responding to emergencies are followed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- follow clear, logical verbal or clear, logical Plain English written instructions
- interpret selected pictorial/graphical and written signs/instructions
- clarify meaning with peers and supervisors
- give accurate verbal or written descriptions of incidents or hazards
- participate in OHS activities, including inspections, meetings and risk assessments

Required knowledge

Essential knowledge:

- applicable commonwealth, state or territory OHS legislation, regulations, standards, codes of practice and industry standards/guidance notes relevant to own work, role and responsibilities
- safety signs and their meanings, including signs for:
 - personal protective equipment
 - emergency equipment
 - dangerous goods class signs
 - specific hazards, such as sharps and radiation
- legal rights and responsibilities of the workplace parties
- the difference between hazard and risk
- nature of common workplace hazards, such as chemicals, bodily fluids, sharps, noise, manual handling, work postures, underfoot hazards and moving parts of

REQUIRED SKILLS AND KNOWLEDGE

- machinery
- standard emergency signals, alarms and required responses
- the elements within the hierarchy of control
- safety measures related to common workplace hazards
- sources of OHS information in the workplace
- the roles and responsibilities of employees, supervisors and managers in the workplace
- roles and responsibilities of OHS representatives, OHS committees and employers
- workplace specific information, including:
 - hazards of the particular work environment
 - potential emergencies relevant to the workplace
 - designated person for raising OHS issues
 - organisation and work procedures particularly those related to performance of own work, specific hazards and risk control, reporting of hazards, incidents and injuries, consultation, use of personal protective equipment and emergency response
 - potential emergency situations, alarms and signals, and required response

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- To demonstrate competence in this unit, a candidate must be able to provide evidence of the application of their knowledge of OHS:
 - in an actual or simulated workplace context involving relevant work processes
 - to their own health and safety within their work area
 - to that of others who may be affected by their actions

EVIDENCE GUIDE	
	• A candidate must also be able to provide evidence of participating in workplace OHS processes • Evidence gathered by an assessor to determine competence will include practical demonstration of competence, including: • workplace demonstration, simulation exercise, scenario or role play • indirect evidence from workplace supervisor reports and workplace documentation
Context of and specific resources for assessment	Products that could be used as evidence include: • verbal and written responses to verbal, pictorial, or physical scenarios • demonstrated action to scenarios, simulations, role plays • completed hazard or incident reports, completed workplace inspection checklists • reports from work group members, supervisor Processes that could be used as evidence include: • how contributions were made to consultative processes • how hazard inspections were carried out • how incident investigations reports were completed Access and equity considerations: • All assessment should be applied with respect to relevant work related access and equity issues • Competence should reflect an ability to work in a culturally diverse environment • Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Hazards

Hazards are:

- a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these

Specific hazards

Specific hazards may include, but are not limited to:

- chemicals
- bodily fluids
- sharps
- noise
- manual handling
- work posture
- underfoot hazards
- moving parts of machinery
- cytotoxic medicines and waste

Other workplace hazards

Other workplace hazards may include:

- occupational violence
- stress
- fatigue
- bullying

Risks

Risks, in relation to any hazard, means:

- the probability and consequences of injury, illness or damage resulting from exposure to a hazard

Residual risk

Residential risk is:

- the risk which remains after controls have been implemented

Personal protective equipment

Personal protective equipment refers to:

- equipment worn by a person to provide

RANGE STATEMENT	
	protection from hazards, by providing a physical barrier between the person and the hazard and may include: • head protection • face and eye protection • respiratory protection • hearing protection • hand protection • clothing and footwear
Incidents	Incidents include: • any event that has caused, or has the potential for, injury, ill-health or damage
Designated personnel	Designated personnel may include: • team leaders • supervisors • OHS representatives • OHS committee members • managers • organisation OHS personnel • other persons designated by the organisation • employers in office based practice
OHS housekeeping	OHS housekeeping includes: • workplace and personal routines designed to improve health and safety, for example, cleaning up spills, keeping walkways, exits and traffic areas clear
Emergency situations	Emergency situations may include: • any abnormal or sudden event that requires immediate action, such as: • serious injury events • events requiring evacuation • fires and explosions • hazardous substance and chemical spills • explosion and bomb alerts • security emergencies, such as armed robberies, intruders and disturbed persons • internal emergencies, such as loss of power or water supply and structural collapse

RANGE STATEMENT	
	external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation

Unit Sector(s)

Unit sector	Occupational health and safety

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOHS3001A Contribute to OHS processes

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit specifies the workplace performance required by an employee to contribute to occupational health and safety (OHS) processes where there is responsibility for own work outputs and possibly limited responsibility for the work output of others.

Application of the Unit

Application of the unit	This unit is intended for application by a skilled worker who contributes to team outcomes. The team may be a designated operational team or a larger work group. Workers are likely to perform work activities requiring a range of well developed skills where some discretion and judgment is required. Application of this unit should be contextualised to reflect any specific workplace risks, hazards and associated safety practices.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and conduct work safely	1.1. Work is planned in accordance with relevant provisions of OHS legislation, standards, codes of practice/compliance codes, guidance material and workplace safe working procedures 1.2. Hazards are identified as part of work planning and work process 1.3. Identified hazards are addressed prior to starting work using judgement within defined scope of responsibilities 1.4. Inadequacies in control measures are reported according to organisation procedures 1.5. Incidents and injuries are reported in line with organisation policies and procedures 1.6. OHS housekeeping is undertaken in work area
2. Support safe work practices in work area	2.1. Information on safe work practices and safety issues in the workplace is shared with members of the work group

ELEMENT	PERFORMANCE CRITERIA
	2.2. The OHS practices of less experienced members of the workgroup are checked and support provided as required to ensure safe work practices are followed 2.3. Members of the workgroup are supported to accurately record incidents and complete associated workplace documentation according to organisation procedures
3. Contribute to OHS participative processes	3.1. OHS issues are raised in accordance with organisation procedures 3.2. Workplace meetings, workplace inspections or other consultative activities are contributed to in a constructive manner to improve safety 3.3. Knowledge of roles and responsibilities of OHS representatives and OHS committees is applied
4. Contribute to hazard identification, OHS risk assessment and risk control activities	4.1. Identified hazards and inadequacies in risk controls are reported 4.2. The workplace is checked for hazards using itemised checklists in accordance with work procedures 4.3. Risk assessments are contributed to 4.4. Input to development and implementation of control measures is provided, with reference to the hierarchy of control
5. Participate in the control of emergency situations	5.1. Emergency signals and alarms are identified and responded to appropriately 5.2. Initial action to control/confine emergency is taken according to organisation procedures, and taking account of the nature and scope of the emergency 5.3. Emergency response procedures are implemented within scope of training and competence

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- check the workplace for hazards and risks using an itemised checklist

REQUIRED SKILLS AND KNOWLEDGE

- provide advice and feedback in a constructive and supportive manner
- communicate with others
- identify emergency situations
- work with others

Required knowledge

Knowledge of:

- applicable commonwealth, state or territory OHS legislation, regulations, standards, codes of practice and industry standards/guidance notes relevant to own work, role and responsibilities
- safety signs and their meanings, including signs for:
 - personal protective equipment
 - emergency equipment
 - dangerous goods class signs
 - specific hazards such as sharps, radiation
- the difference between hazard and risk
- sources of OHS information within the workplace with knowledge of external sources of OHS information
- nature of common workplace hazards, such as chemicals, bodily fluids, noise, manual handling, work postures, underfoot hazards and moving parts of machinery
- basic hazard identification procedures, such as workplace inspections and review of workplace data
- standard emergency signals, alarms and required responses
- principles of basic risk assessment
- hierarchy of control and its application
- personal protective equipment requirements, including use, storage and maintenance
- roles and responsibilities of employees, supervisors and managers in the workplace
- roles and responsibilities of OHS representatives and OHS committees
- workplace specific information, including:
 - hazards of the particular work environment
 - hazard identification procedures relevant to the hazards in their workplace
 - designated person for raising OHS issues
 - organisation and work procedures particularly those related to performance of own work, specific hazards and risk control, reporting of hazards, incidents and injuries and OHS issue resolution, consultation, use of personal protective equipment and emergency response
 - potential emergency situations, alarms and signals and required response
- the legal rights and responsibilities of the workplace parties

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- To demonstrate competence in this unit, a candidate must be able to provide evidence of contribution to OHS processes in the workplace. This includes:
 - addressing their own health and safety
 - addressing that of others who may be affected by their actions
 - supporting members of the workgroup who may be less experienced in the workplace in regard to OHS matters
 - taking some initiative to address hazards and manage risks at a systemic level
- Evidence gathered by an assessor to determine competence will include practical demonstration of competence, including:
 - workplace demonstration, simulation exercise, scenario or role play
 - indirect evidence from workplace supervisor reports, workplace documentation, and written responses to problems, scenarios and case studies
- Evidence of workplace performance over time must be obtained to inform a judgement of competence.

Context of and specific resources for assessment

Products that could be used as evidence include:

- verbal and written responses to verbal, pictorial or physical scenarios
- demonstrated response to scenarios, simulations, role plays
- completed hazard or incident reports, completed workplace inspection checklists
- reports from workgroup members, supervisors

Processes that could be used as evidence include:

EVIDENCE GUIDE	
	• how workplace checks/inspections are carried out • how hazards are addressed • how mentoring of fellow workgroup members is undertaken • how incident investigations reports were completed Access and equity considerations: • all assessment should be applied with respect to relevant work related access and equity issues • competence should reflect an ability to work in a culturally diverse environment • assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Hazard identification	Hazard identification is • the process of identifying sources of harm, and may be required: • before new forms of work and organisation of work are implemented • before changes are made to workplace,

RANGE STATEMENT	
	equipment, work processes or work arrangements • as part of planning major tasks or activities, such as equipment shutdowns • following an incident report • when new knowledge becomes available • at regular intervals during normal operations • prior to disposal of equipment, or materials
Hazards	Hazards refer to: • a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these
Specific hazards	Specific hazards may include, but are not limited to: • chemicals • bodily fluids • sharps • noise • manual handling • work posture • underfoot hazards • moving parts of machinery • cytotoxic medicines and waste
Other workplace hazards	Other workplace hazards may include: • occupational violence • stress • fatigue • bullying
Risks	Risks, in relation to any hazard, means: • the probability and consequences of injury, illness or damage resulting from exposure to a hazard
Residual risk	Residual risk is: • the risk which remains after controls have been implemented

RANGE STATEMENT	
Organisation procedures	Organisation procedures include: • policies and procedures underpinning the management of OHS, including: • hazard, incident and injury reporting • hazard identification, risk assessment and control • consultation and participation • quality system documentation
OHS housekeeping	OHS housekeeping includes: • workplace and personal routines designed to improve health and safety, for example, cleaning up spills, keeping walkways, exits and traffic areas clear
Information	Information includes: • hazard, incident and investigation reports • workplace inspection reports • incident investigation reports • minutes of meetings • job safety analyses and risk assessments • material safety data sheets (MSDS) and registers • employees handbooks • manufacturers' manuals and specifications • information from OHS representatives • reports from OHS committee • information from external sources on hazards and risk relevant to the work group
Work procedures	Work procedures include: • standard operating procedures • batch specifications • operator or manufacturer manuals • procedures for selecting, fitting, using and maintaining personal protective equipment
Incidents	Incidents include: • any event that has caused or has the potential for injury, ill-health or damage
Other workplace documentation	Other workplace documentation may include:

RANGE STATEMENT	
	• job checklists and schedules • workplace inspection checklists
Risk controls	Risk controls include: • the devices and methods to, where practicable, eliminate the hazard or, where this is not practicable, minimise the risk associated with the hazard
Designated persons	Designated persons may include: • team leaders • supervisors • OHS representatives • OHS committee members • managers • organisation OHS personnel • other persons designated by the organisation
Hierarchy of control	Hierarchy of control is the preferred order of control measures for OHS risks: • elimination (e.g. controlling the hazard at the source) • substitution (e.g. replacing one substance or activity at the source) • engineering control (e.g. installing guards on machinery) • administration control (e.g. policies and procedures for safe work practices) • personal protective equipment (e.g. respirators and ear plugs)
Emergency signals and alarms	Emergency signals and alarms may include: • machinery malfunction alarms • fire alarms • evacuation alarms or announcements • reversing beepers on mobile plant
Emergencies	Emergency may include any abnormal or sudden event that requires immediate action, such as: • serious injury events • events requiring evacuation • fires and explosions • hazardous substance and chemical spills

RANGE STATEMENT

	• explosion and bomb alerts • security emergencies, such as armed robberies, intruders and disturbed persons • internal emergencies, such as loss of power or water supply and structural collapse • external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation

Unit Sector(s)

Unit sector	Occupational health and safety

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOHS4002A Maintain OHS processes

Modification History

November 2011: minor typographical error corrected.

Unit Descriptor

Unit descriptor	This unit of competency specifies the workplace performance required by an employee with supervisory responsibilities, to maintain organisation OHS processes

Application of the Unit

Application of the unit	This unit is intended to be applied at the level of team leader or supervisor Workers are likely to perform a broad range of complex and non-routine activities together with leadership and guidance in planning and organising activities for a small work group Application of this unit should be contextualised to reflect any specific workplace risks, hazards and associated safety practices

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Provide information to the work group	1.1. Relevant requirements of OHS legislation, standards, codes of practice/compliance codes, guidance material and safe working procedures and practices are clearly and accurately explained to the work group 1.2. Information on organisation policies and procedures is provided in a readily accessible manner and clearly explained to the work group 1.3. Roles and responsibilities of workplace OHS representatives and OHS committees, supervisors and managers are clearly explained 1.4. Information on hazards, the outcomes of risk assessments, and required risk controls is provided to the work group, in an accessible and understandable format
2. Ensure others are able to implement safe work practices	2.1. Personal protective equipment appropriate to the work is available and functional 2.2. Processes are implemented to confirm that others in the work group can identify hazards, assess risks and required risk controls and are following safe work practices, and organisation policies and procedures 2.3. OHS training needs are identified and either addressed or reported to those with control

ELEMENT	PERFORMANCE CRITERIA
3. Implement OHS participative processes	3.1. Work group is consulted and advice in relation to OHS matters provided relevant to their work 3.2. OHS issues raised are dealt with promptly, and in accordance with organisation procedures and legislative requirements, or referred to appropriate personnel 3.3. Outcomes of consultation regarding OHS are recorded and promptly communicated to the work group
4. Monitor compliance with work procedures	4.1. Work procedures are checked for availability, clarity and completeness, and any deficiencies addressed or reported to appropriate persons 4.2. Any deviations from procedures are identified and addressed or reported to appropriate persons 4.3. Hazard identification and reporting processes are evaluated for effectiveness and any deficiencies addressed or reported to appropriate persons 4.4. OHS housekeeping practices are monitored to ensure that workplace standards are maintained, and action taken to address any deficiencies 4.5. Behaviour is consistent with organisation safe working procedures and practices
5. Implement hazard identification, risk assessment and risk control procedures	5.1. Hazards are identified, assessed and eliminated with residual risk reported according to organisation procedures 5.2. Risk assessments are conducted 5.3. Develop control measures are developed taking account of the hierarchy of control 5.4. Outcomes of risk assessments and identified risk controls are implemented and supported 5.5. Deficiencies in ohs risk controls are identified, addressed and/or reported according to organisation procedures 5.6. Personal professional limitations are identified and expert advice sought as required
6. Implement organisation procedures for maintaining OHS records	6.1. Feedback is obtained to ensure that workgroup is aware of organisation reporting requirements 6.2. OHS records are reviewed to confirm that they are completed in an accurate, thorough and timely manner in accordance with legislative and organisation requirements 6.3. Aggregate information and data from records is used

ELEMENT	PERFORMANCE CRITERIA
	to identify hazards and monitor risk controls
7. Implement emergency procedures	7.1. Feedback is obtained to ensure that emergency procedures are available and known by the work group 7.2. Processes are implemented to ensure that emergency equipment is available and routinely checked for functionality 7.3. Processes are implemented to ensure that others in the workgroup are able to respond appropriately to emergencies 7.4. Investigations are conducted or contributed to in order to identify causes of emergencies 7.5. Control measures are identified, implemented or supported to prevent recurrence and minimise risk of emergencies

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- use technical skills to access OHS information
- use language and literacy skills to interpret OHS documentation
- communicate with personnel in the work team, other work teams, managers and experts advisers
- supervise and direct staff
- conduct team meetings
- relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

Required knowledge

Knowledge of:

- the difference between hazard and risk
- sources of OHS information both internal and external to the workplace
- general duty requirements of OHS legislation and also regulatory requirements relevant to the particular industry/type of work site

REQUIRED SKILLS AND KNOWLEDGE

- the roles and responsibilities of employees, supervisors and managers in the workplace
- nature of common workplace hazards, such as chemicals, noise, manual handling, work postures, underfoot hazards and moving parts of machinery
- guidance material, including codes of practice/compliance codes relevant to the particular industry/type of work site
- hazard identification procedures, such as workplace inspections and review of workplace data
- principles of risk management including the hierarchy of control and its application
- personal protective equipment requirements, including use, storage and maintenance
- legislative requirements for record keeping and reporting
- standards and guidelines related to emergency procedures
- roles and responsibilities of OHS representatives and OHS committees
- workplace specific information, including:
 - hazards of the particular work environment
 - hazard identification procedures relevant to the hazards in their work place
 - risk controls for specific hazards
 - designated person for raising OHS issues
 - organisation procedures related to OHS, including hazard, incident and injury reporting, hazard identification, risk assessment and control, consultation and participation, incident investigation and record keeping
 - work procedures related to the work of the team/work group including use of personal protective equipment and emergency response
 - potential emergency situations, alarms and signals and required response

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and

- To demonstrate competence in this unit, a candidate

EVIDENCE GUIDE	
evidence required to demonstrate competency in this unit	must be able to provide evidence of: - maintaining OHS processes in the workplace particularly in relation to the supervision of a small workgroup - Evidence gathered by an assessor to determine competence will include: - written or verbal responses to scenarios and case studies - provision of workplace examples - evidence from workplace supervisor reports - portfolio of workplace documentation - Evidence of workplace performance over time must be obtained to inform a judgement of competence.
Context of and specific resources for assessment	Products that could be used as evidence include: - verbal and written responses to verbal, written or physical scenarios - completed examples of information provided to work group, risk assessments, risk controls developed, reports to managers, reports on workplace inspections, audits, emergency exercises - reports from work group members, supervisor Processes that could be used as evidence include: - how information transfer was organised and conducted - how risk assessments were conducted - how deviations from workplace procedures were addressed Access and equity considerations: - all assessment should be applied with respect to relevant work related access and equity issues - competence should reflect an ability to work in a culturally diverse environment - assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on Aboriginal and/or Torres Strait Islander clients and communities.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for	To ensure consistency in one's performance, competency

EVIDENCE GUIDE**assessment**

should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

OHS legislation

OHS legislation includes:

- commonwealth, state and territory OHS Acts and regulations

Standards

Standards include:

- documents produced by national bodies, OHS regulators or industry bodies, that prescribe preventative action to avert occupational deaths, injuries and diseases
- standards are of an advisory nature only, except where a law adopts the standard and thus makes it mandatory
- they may be called up as evidence in court or other enforcement action

Codes of practice/compliance codes

Codes of practice/compliance codes are:

- documents generally prepared to provide advice to employers and workers, of an acceptable way of achieving standards
- codes of practice/compliance codes may:
 - be incorporated into regulations
 - not relate to a standard
 - be called up as evidence in court or other enforcement action

Guidance material

Guidance material:

RANGE STATEMENT	
	• is an advisory technical document, providing detailed information for use by unions, employers, management, health and safety committee members and representatives, safety officers and others requiring guidance • advises on 'what to do' and 'how to do it' • has no legal standing
Organisation policies and procedures include:	Organisation policies and procedures include: • policies and procedures underpinning the management of OHS, including: • hazard, incident and injury reporting • hazard identification, risk assessment and control • consultation and participation • incident investigation • quality system documentation
Hazards	Hazards refer to: • a source or situation with the potential for harm in terms of human injury or ill-health, damage to property, the environment, or a combination of these
Specific safety related hazards	Specific safety related hazards may include but are not limited to: • chemicals • bodily fluids • sharps • noise • manual handling • work posture • underfoot hazards • moving parts of machinery • cytotoxic medicines and waste
Other workplace hazards	Other workplace hazards may include: • occupational violence • stress • fatigue • bullying
Risks	Risks, in relation to any hazard, means:

RANGE STATEMENT	
	the probability and consequences of injury, illness or damage resulting from exposure to a hazard
Risk assessments	Risk assessments involve analysing a hazard to: - identify factors influencing the risk and the range of potential consequences, such as: - effectiveness of existing controls - likelihood of each consequence considering exposure and hazard level
Risk controls	Risk controls include: The devices and methods to, where practicable, eliminate the hazard or, where this is not practicable, minimise the risk associated with the hazard
Personal protective equipment	Personal protective equipment includes: - equipment worn by a person to provide protection from hazards, by providing a physical barrier between the person and the hazard and may include: - head protection - face and eye protection - respiratory protection - hearing protection - hand protection - clothing and footwear
Work procedures	Work procedures include: - standard operating procedures - batch specifications - operator or manufacturer manuals - procedures for selecting, fitting, using and maintaining personal protective equipment
Hazard identification	Hazard identification is: - the process of identifying sources of harm and may be required: - at design or pre purchase of equipment and materials - at commissioning or pre-implementation of new processes or practices

RANGE STATEMENT	
	• before new forms of work and organisation of work are implemented • before changes are made to workplace, equipment, work processes or work arrangements • as part of planning major tasks or activities, such as equipment shutdowns • following an incident report • when new knowledge becomes available • at regular intervals during normal operations • prior to disposal of equipment, buildings or materials
Reporting processes	Reporting processes include: • hazards reports • maintenance requests and reports • reports on completion of inspections • incident reports • reports of non-compliance with work procedures • reporting on progress of action plans
OHS housekeeping practices	OHS housekeeping practices address items, such as: • workplace cleanliness and tidiness • unobstructed walkways and emergency exits • underfoot conditions • work space around equipment and machinery • functioning services, such as lighting, air flow and ventilation, and emergency lighting • storage areas including manual handling issues, storage, personal protective equipment • signage
Residual risk	Residual risk is: • the risk which remains after controls have been implemented
Hierarchy of control	Hierarchy of control is the preferred order of control measures for OHS risks: • elimination (e.g. controlling the hazard at the source)

RANGE STATEMENT	
	• substitution (e.g. replacing one substance or activity at the source) • engineering control (e.g. installing guards on machinery) • administration control (e.g. policies and procedures for safe work practices) • personal protective equipment (e.g. respirators and ear plugs)
Expert advice	Expert advice can be obtained from: • persons either internal or external to the organisation including: • safety professionals • ergonomists • occupational hygienists • audiologists • safety engineers • toxicologists • occupational health professionals • OHS representatives • OHS committees • other persons providing specific technical knowledge or expertise in areas related to OHS, including: • risk managers • health professionals • injury management advisors • regulatory bodies • legal practitioners with experience in OHS • engineers (e.g. design, acoustic, mechanical and civil) • security and emergency response personnel • workplace trainers and assessors • maintenance and trade persons
OHS records	OHS records may include: • hazard, incident and investigation reports • workplace inspection reports • first aid records • minutes of meetings

RANGE STATEMENT	
	• job safety analyses, safe work method statements and risk assessments • material safety data sheets (MSDS) and registers • employees handbooks • plant and equipment operation records, including those relevant to registered plant • maintenance and testing reports • training records • environmental monitoring records • health surveillance records
Legislative requirements for record keeping	Legislative requirements for record keeping include those specified under: • OHS legislation for: • serious incident and injury reporting • registered plant • hazardous substances and dangerous goods • environmental monitoring • health surveillance • Privacy legislation
Emergencies	Emergencies may include any abnormal or sudden event that requires immediate action, such as: • serious injury events • events requiring evacuation • fires and explosions • hazardous substance and chemical spills • explosion and bomb alerts • security emergencies, such as armed robberies, intruders and disturbed persons • internal emergencies, such as loss of power or water supply and structural collapse • external emergencies and natural disasters, such as flood, storm and traffic accident impacting on the organisation
Emergency equipment	Emergency equipment is equipment required as part of the emergency response by the organisation and includes: • first aid equipment • eye wash shower or portable eye washes

RANGE STATEMENT	
	• fire extinguishers and equipment • communication equipment • evacuation alarms • evacuation equipment, especially that for disabled persons • torches • items of clothing, such as coloured hats and vests
Incidents	Incidents include: • any event that has caused or has the potential for injury, ill-health or damage

Unit Sector(s)

Unit sector	Occupational health and safety

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP1003A Carry out manual handling tasks

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to participate in workplace processes to identify manual handling requirements of a work function, identify manual handling risks, assess level of risk and apply appropriate risk elimination or control measures.

Application of the Unit

Application of the unit	This unit applies to a worker required to conduct lifting or moving of items as part of their work role. It is designed to support existing workplace programs to manage occupational health and safety (OHS) hazards by enabling employees to contribute to risk assessment and control. It may include the use of related equipment, such as trolleys, pallet jacks and other manual handling aids.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Participate in processes to identify and assess manual handling	1.1. Manual handling components of a work function are identified 1.2. Manual handling risks are identified and reported in accordance with hazard and incident reporting procedures 1.3. Risks to self and others of manual handling are assessed within level of responsibility
2. Contribute to manual handling risk minimisation	2.1. Equipment is available and in a fit state for use 2.2. Clothing and footwear, including personal protective clothing, does not contribute to manual handling risk
3. Plan and conduct manual handling	3.1. Sources of risk are identified 3.2. Workplace layout and environment is modified within area of control to minimise manual handling risk 3.3. Work tasks are modified within area of control to minimise the risk of injury 3.4. Manual handling aids are used according to workplace instructions 3.5. Movement and postures used minimise the risk of injury within the limits of the work environment and the demands of the task

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information relating to use of equipment and other task requirements
- identify any manual handling requirements of the work function and specifically any manual handling risks
- report manual handling risks using appropriate hazard and incident reporting procedures
- identify manual handling risks, including:
 - risks to self and others
 - any existing arrangements to control risks
- identify scope of responsibility to eliminate or control level of risk (for hazards outside scope of responsibility, identify and use the appropriate reporting and consultation arrangements to address hazards)
- participate in consultative processes to evaluate options for removing or controlling manual handling risks, including applying hierarchy of control
- select appropriate equipment and techniques to suit manual handling task within workplace procedures
- inspect manual handling-related equipment/aids/tools to confirm fitness for use, including identifying and correcting and/or reporting signs of wear and tear
- follow procedures to complete manual handling tasks to maintain safety of self and others
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- different types of manual handling activities, including lifting, reaching, pushing, pulling, holding, restraining, throwing and carrying
- types of injuries that can result from manual handling
- aspects of manual handling that may be risks (hazard identification), such as:
 - repetitive or sustained application of force
 - repetitive or sustained awkward posture
 - repetitive or sustained movement
 - application of high force

REQUIRED SKILLS AND KNOWLEDGE

- manual handling of live animals (related to handling of poultry)
- manual handling of unstable or unbalanced loads, such as liquids
- workplace procedures and responsibilities for identifying and reporting manual handling hazards
- factors to be considered when assessing manual handling risks relevant to work role (refer to workplace risk assessment sheets and code of practice advice where available), including:
 - postures
 - movements
 - force required
 - duration and frequency of manual handling activity
 - environmental conditions, such as hot and cold work environments
- procedures and responsibilities for conducting risk assessments of manual handling tasks
- typical options for eliminating or controlling manual handling risks associated with work functions, including principles of hierarchy of control and the advantages and disadvantages of different options
- types of equipment and/or techniques used to eliminate or reduce manual handling risks in the workplace, including when and how to use each type of technique/equipment relevant to manual handling tasks in work role
- level of authority to address OHS issues related to manual handling and related workplace arrangements for managing safety issues
- sources of advice on manual handling relevant to work function
- equipment available to assist manual handling, related inspections required to identify faulty equipment and related reporting procedures
- movement and postures that increase the risk of injury, and movements and postures to minimise the force in the body as applied to specific tasks in the workplace

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance

EVIDENCE GUIDE	
	with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify manual handling tasks required for work activity and associated risks • eliminate risk through movement, posture and effectively using equipment provided • modify work to eliminate or minimise risk • apply safe work procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • work procedures, including advice on manual handling requirements and safe work practices • workplace documentation and related advice, such as codes of practice to support OHS arrangements for hazard identification, risks assessment and control • materials and related equipment as appropriate for manual handling • information on equipment capacity and operating procedures where relevant • reporting and monitoring systems.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and

RANGE STATEMENT	
regional contexts) may also be included.	
Policies and procedures	Work is carried out according to company policies and procedures, legislation, regulations and industrial awards and agreements
Workplace information	Workplace information may include: • standard operating procedures (SOPs) • OHS procedures • equipment manufacturers' advice • material safety data sheets (MSDS) • codes of practice and related advice
Equipment	Equipment may include but is not limited to: • trolleys • pallet jacks • conveyors, • vacuum lifters • other mechanical handling and lifting aids and equipment
Task-specific training	Task specific training is provided as appropriate
Contributions to manual handling risk minimisation	Contributions to manual handling risk minimisation includes: • reporting equipment requiring maintenance, especially wheeled equipment or other equipment where friction may increase force requirements
Changes to workplace layout and environment	Changes to workplace layout and environment within area of control may include but not be limited to: • changes in location of load, such as use of bench to not lift from floor • arrangement of items to eliminate above shoulder handling • placement of trolley • using sit stand stools • using task lighting • using a footrest
Task modifications within area of control	Task modifications within area of control may include but are not limited to:

RANGE STATEMENT	
	• changes to frequency, duration, number of objects handled • route selected • seeking assistance as appropriate • housekeeping to minimise obstacles
Assessment of risks and evaluation of control options according to the hierarchy of control	Assessment of risks and evaluation of control options according to the hierarchy of control is carried out in consultation with others as required by workplace arrangements and regulatory requirements for risk assessment and control

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2003A Clean equipment in place

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to prepare process equipment for cleaning in place (CIP) or in-line.

Application of the Unit

Application of the unit	This unit applies to food processing equipment that is fixed in place and cannot be moved to a cleaning station. It requires the operator to initiate, monitor and control variables during cleaning. Where this is not a requirement of a CIP system, this unit may not be relevant. Where the operator is primarily responsible for cleaning and/or where they require a more detailed knowledge of cleaning and sanitation processes to carry out cleaning responsibilities, FDFOP2004A Clean and sanitise equipment, should be considered.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for cleaning	1.1. Chemical stocks are available to meet cleaning and sanitation requirements 1.2. Services are confirmed as available and ready for operation 1.3. Equipment shutdown is planned and equipment is taken off-line for cleaning 1.4. Equipment and related valves and pipework are configured to confirm readiness for cleaning 1.5. The plant is set for the cleaning cycle
2. Operate and monitor the cleaning process	2.1. The cleaning cycle is undertaken according to company policies and procedures 2.2. The cleaning process is monitored to confirm cleaning meets company requirements 2.3. Cleaning data is recorded according to workplace reporting requirements 2.4. Out-of-specification process and equipment performance is identified, rectified and/or reported
3. Dispose of waste and return plant to operating condition	3.1. Cleaning chemicals are flushed from plant and disposed of according to company policies and procedures

ELEMENT	PERFORMANCE CRITERIA
	3.2. Work is conducted according to environmental requirements
	3.3. Plant is set up to meet operational requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information, such as the cleaning schedule to identify cleaning requirements
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary materials and services
- handle and prepare cleaning and sanitation agents safely, including following correct handling and preparation procedures and use of appropriate protective clothing and equipment as required
- schedule cleaning and/or liaise with related work areas to take equipment and area off-line with minimal disruption to production
- prepare equipment and area for cleaning, such as rendering equipment safe to clean, removing obstacles and unnecessary equipment, correctly positioning equipment (e.g. valves, pipes, vents and taps), selecting appropriate cleaning cycle, removing waste and/or dismantling equipment
- clean equipment according to cleaning process cycle and procedures, such as starting up and operating the CIP process in both automatic and manual modes
- monitor the process and equipment operation to maintain the cleaning process within the required parameters
- locate emergency stop functions on equipment
- return plant to operating order
- return area to working order
- take corrective action in response to out-of-specification results
- advise affected work areas of cleaning schedule and progress
- maintain and store chemicals and related equipment as required
- carry out relevant checks and inspections to confirm effectiveness of cleaning
- sort, collect, treat, recycle or dispose of waste
- record cleaning information
- maintain work area to meet housekeeping standards

REQUIRED SKILLS AND KNOWLEDGE

- conduct routine maintenance according to enterprise procedures
- take samples and conduct tests according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge***Knowledge of:***

- purpose and basic principles of CIP, including the use and functions of caustic and acid solutions, and cleaning sequence and stages as required in the workplace
- purpose and use of cleaning equipment and chemicals used
- terminology relating to the chemical solutions used
- safe work procedures, including appropriate signage of cleaning activities and safe handling and storage of cleaners and sanitisers used
- purpose and limitations of protective clothing and equipment
- cleaning and sanitation requirements, including different levels of cleaning requirements depending on the reason for cleaning
- characteristics of cleaning and sanitising chemicals used, including basic composition as well as compatibility of chemicals with types of equipment
- methods used to render equipment safe to clean, including the status and purpose of equipment guards, relevant lock out/tagout and isolation procedures
- equipment settings required for cleaning and for operating respectively
- basic operating principles of process control where relevant, including the relationship between control panels and systems and the physical equipment
- inspection points for cleaning and sanitation
- consequences of contamination of process flows by cleaning solutions and related safeguards
- types of waste generated by both the production and the cleaning process and related collection, treatment and disposal requirements
- environmental consequences of incorrect cleaning waste disposal procedures
- requirements to liaise/advise related work areas
- reporting and recording systems
- routine maintenance procedures where relevant
- sampling methods and test procedures where relevant

Evidence Guide**EVIDENCE GUIDE**

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- shut down equipment and prepare for cleaning
- prepare and use chemicals according to safe work requirements
- clean equipment to meet work standards
- monitor cleaning and report or address any non-compliances
- flush equipment and dispose of waste according to environmental guidelines
- complete required documentation
- apply safe work practices and identify OHS hazards and controls
- apply food safety procedures.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- cleaning procedures and related advice on equipment operation, including advice on safe work practices and environmental requirements
- personal protective clothing and equipment
- equipment to be cleaned, and related CIP system
- chemicals and/or automated chemical addition system
- services as required
- MSDS where appropriate
- cleaning schedule or advice and related standard operating procedures
- housekeeping standards and procedures
- advice on environmental management issues relevant to work responsibilities
- workplace information recording systems, requirements and procedures
- sampling and testing schedules and procedures as

EVIDENCE GUIDE	
	relevant to cleaning requirements in the workplace.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2011A Conduct routine maintenance • FDFOP2013A Apply sampling procedures • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply and reference to food safety is replaced by GMP
Workplace information	Workplace information may include: • standard operating procedures (SOPs) • specifications • production cleaning schedules and instructions • signs and symbols • materials safety data sheets (MSDS) • manufacturers' advice • standard forms and reports

RANGE STATEMENT	
Dosing of cleaning chemicals	Dosing of cleaning chemicals may be: • automatically controlled or manually dosed
Services	Services may include: • power • water • Steam • compressed and instrumentation air
Testing	Where tests are conducted as part of operation, a typical requirement is measurement of pH
Monitoring the process	Monitoring the process is dependent on the nature of equipment. Examples of monitoring include: • chemical strength • cycle time • temperatures • time • storage tank levels • condensate quality
Operation and monitoring of equipment and processes	Operation and monitoring of equipment and processes typically requires the use of control panels and systems

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2004A Clean and sanitise equipment

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers cleaning, sanitation and related procedures for food processing production equipment.

Application of the Unit

Application of the unit	This unit does not cover cleaning in place (CIP) processes. Where this is a required competency, select <i>FDFOP2003A</i> Clean equipment in place. Basic cleaning and sanitation procedures are covered in operational units. This unit should be selected where the operator is primarily responsible for cleaning and/or where they require a more detailed knowledge of cleaning and sanitation processes to carry out cleaning responsibilities. This unit applies to both wet and dry cleaning methods.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for cleaning	1.1.Cleaning/sanitising agents and services are available and ready for use 1.2.Equipment is cleared of product and/or packaging consumables in preparation for cleaning 1.3.Equipment is rendered safe to clean
2. Clean and sanitise equipment to meet workplace requirements	2.1.Equipment is cleaned and sanitised according to workplace procedure and requirements 2.2.Equipment is inspected to confirm operating condition and cleanliness 2.3.Unacceptable equipment condition is identified and reported according to workplace procedures 2.4.Cleaning equipment and chemicals are stored according to workplace procedure 2.5.Waste from cleaning process is disposed of according to workplace procedures 2.6.Work is conducted in accordance with workplace environmental guidelines 2.7.Equipment is restored to operating order

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information, such as the cleaning schedule to identify cleaning requirements
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary cleaning and sanitising equipment and services
- select and prepare cleaners and sanitisers as required according to workplace procedures
- prepare equipment for cleaning, such as rendering equipment safe to clean, clearing product and waste materials, covering motors and instrumentation where steam or water hoses are used, and simple dismantling of equipment parts
- advise any affected work areas/operators of cleaning progress to coordinate timely completion with minimal disruption to production
- clean and sanitise equipment as required according to workplace procedures and cleaning schedule
- return equipment to operating order (this may involve basic assembly of equipment parts)
- inspect equipment to identify equipment condition and cleanliness
- locate emergency stop functions on equipment
- report and/or correct unacceptable equipment condition
- maintain housekeeping standards
- prepare cleaners and sanitisers as required
- store cleaners, sanitisers and related equipment as required
- carry out relevant checks and inspections
- maintain work area to meet housekeeping standards
- conduct routine maintenance according to enterprise procedures
- take samples and conduct tests according to enterprise procedures
- record cleaning and sanitation information according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- the purpose of cleaning and sanitation and importance in maintaining food safety
- functions of cleaners, sanitisers and related equipment

REQUIRED SKILLS AND KNOWLEDGE

- safe work procedures, including appropriate signage of cleaning activities, safe handling and storage of cleaners and sanitisers used, safety when using cleaning methods, such as hot water and steam hoses, and status and purpose of safety guards
- purpose and limitations of protective clothing and equipment
- cleaning and sanitation requirements relating to work responsibilities, including the need for different levels of cleaning where relevant
- procedures for preparing cleaners and sanitizers as required
- cleaning method/s to be followed relating to work responsibilities
- other work areas/operators who need to be consulted/advised on timing of cleaning
- methods used to render equipment safe to clean, including understanding the status and purpose of equipment guards, relevant lock out/tagout and isolation procedures and related equipment settings for both cleaning and operating as required
- procedures for conducting cleaning and sanitising
- types of waste generated by the cleaning process and related collection, treatment and disposal requirements
- potential environmental impact of incorrect waste handling
- inspection, cleaning and storage requirements of cleaning equipment used
- inspection points and methods for confirming the effectiveness of cleaning and sanitation, including visual inspection, and where required, recording of cleaning conducted
- inspection requirements to confirm equipment condition, including acceptable equipment condition, ability to identify faulty or unacceptable equipment and take required corrective action
- recording requirements and responsibilities
- routine maintenance procedures where relevant
- sampling methods and test procedures where relevant

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

EVIDENCE GUIDE	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • prepare equipment for cleaning • prepare and use chemicals according to safe work requirements • clean and sanitise equipment to meet work standards • monitor cleaning and report or address any non-compliances • dispose of waste according to environmental guidelines • complete required documentation • apply safe work practices and identify OHS hazards and controls • apply food safety procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • cleaning procedures and related advice on equipment operation, including advice on safe work practices and environmental requirements • personal protective clothing and equipment • cleaning schedule and related procedures, including OHS advice • equipment/items to be cleaned • chemicals, cleaning equipment and services as required • MSDS where appropriate • housekeeping standards and procedures • cleaning/sanitising information recording system and procedures • advice on environmental management issues relevant to work responsibilities.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2011A Conduct routine maintenance • FDFOP2013A Apply sampling procedures • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where

EVIDENCE GUIDE

possible, over a number of assessment activities.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures

Work is carried out in accordance with company procedures, licensing requirements, legislative requirements, and industrial awards and agreements. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply and reference to food safety is replaced by GMP

Workplace information

Workplace information may include:

- standard operating procedures (SOPs)
- specifications
- production and cleaning schedules
- labels and codes
- safety signs and symbols
- materials safety data sheets (MSDS)
- standard forms
- written or verbal instruction

Cleaning and sanitising chemicals

Cleaning and sanitising chemicals may be:

- pre-mixed or manually mixed

Preparing/restoring equipment to operating order

Preparing/restoring equipment to operating order may involve:

- simple dismantling and reassembling of equipment parts
- basic isolation
- covering of motors and instrumentation

Services

Services may include:

RANGE STATEMENT	
	• power • water • steam • compressed and instrumentation air
Inspecting cleaning effectiveness	Inspecting cleaning effectiveness typically involves: • carrying out a visual inspection

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2005A Work in a socially diverse environment

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to work in a socially diverse environment, including the development and application of cultural awareness required to interact effectively with people from diverse backgrounds.

Application of the Unit

Application of the unit	This unit is based on the tourism and hospitality unit THHCOR2A Work in a socially diverse environment and the transport and distribution unit TDTG701A Work in a socially diverse environment. This unit involves the application of communication principles and problem solving techniques to facilitate work in a socially diverse environment.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Communicate with people from diverse backgrounds	1.1. People from all cultural groups are valued and treated with respect and sensitivity 1.2. Verbal and non-verbal communication takes account of cultural differences 1.3. Where language barriers exist, efforts are made to communicate through use of gestures or simple words in the other persons' language 1.4. Assistance from colleagues, specialist resources or outside organisations is obtained when required
2. Respond to cross-cultural misunderstandings	2.1. Issues which may cause conflict or misunderstanding in the workplace are identified 2.2. Difficulties are addressed with the appropriate people in the workplace 2.3. When difficulties or misunderstandings occur, possible cultural differences are considered 2.4. Efforts are made to resolve the misunderstanding, taking account of cultural considerations 2.5. Issues and problems that cannot be resolved are referred as required for follow up

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify and recognise cultural differences in the workplace
- apply understanding of cultural difference to communicate effectively to achieve work requirements, including selecting appropriate communication style to suit audience
- identify and respond to cross-cultural misunderstandings
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor

Required knowledge

Knowledge of:

- principles of equal employment opportunity (EEO) and anti-discrimination legislation as they apply to company and employee rights and responsibilities in the workplace
- recognition of the different cultural groups in the workplace
- understanding of the basis of cultural difference, including behaviour or practices that can cause offence, and related strategies for interacting in ways that are culturally sensitive
- communication strategies and styles appropriate to diverse audiences related to the workplace

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

EVIDENCE GUIDE	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify responsibilities according to the principles of anti-discrimination legislation • treat people from other cultures with respect and sensitivity • make efforts to communicate and understand others using verbal and non-verbal techniques • seek assistance when required to facilitate understanding • treat cross-cultural misunderstandings with sensitivity and act to resolve the matter with respect.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • advice on legal rights and responsibilities relating to anti-discrimination and EEO • related company policies and procedures • opportunities to interact with others using typical workplace communication processes.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out according to company policies

RANGE STATEMENT	
	and procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation includes: • anti-discrimination • EEO
People from diverse backgrounds	People from diverse backgrounds may include: • any person involved in or related to the work process, such as work colleagues, managers and external personnel
Cultural differences	Cultural difference may include but is not limited to: • race • special needs • disabilities • gender • marital status • sexual preference • age
Examples of cultural differences	Examples of cultural differences may include but are not limited to: • language spoken and related communication style • levels of formality/informality • personal grooming • family obligations • recognised holidays • customs • work ethic • product preferences
Outside organisations	Outside organisations may include but are not limited to: • interpretative services • diplomatic services • local cultural organisations • appropriate government agencies

RANGE STATEMENT

	• educational institutions

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2011A Conduct routine maintenance

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to inspect equipment and carry out routine maintenance and/or adjustment using a limited range of hand tools.

Application of the Unit

Application of the unit	This unit has application in a food production environment. It typically targets the production worker responsible for conducting simple and routine maintenance tasks to support the operation of machines or equipment. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Food Standards Code and reference to food safety is replaced by GMP.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Conduct routine inspection of plant and equipment	1.1. Equipment is inspected to identify signs of wear 1.2. Nature of maintenance requirement is assessed
2. Prepare to conduct routine maintenance	2.1. Maintenance task is assessed to determine tools and services required 2.2. Equipment is prepared for maintenance 2.3. Hand tools are selected according to task requirements 2.4. Tools are checked before use and unsafe and/or faulty items are reported within standard procedures 2.5. Maintenance is planned and scheduled in consultation with affected work areas to minimise disruption to production
3. Carry out routine maintenance	3.1. Routine maintenance on equipment is carried out according to workplace procedures 3.2. Maintenance activities are reported according to workplace reporting requirements
4. Complete maintenance tasks	4.1. Equipment is returned to operating order 4.2. Tools and materials are stored according to workplace procedure

ELEMENT	PERFORMANCE CRITERIA
	4.3. Relevant personnel are notified of maintenance completion 4.4. Housekeeping standards are maintained 4.5. Work is conducted in accordance with workplace environmental guidelines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information such as the equipment history, faults or difficulties
- select, fit and use personal protective clothing and/or equipment
- inspect equipment for signs of wear, such as visual inspections to detect leaks, listening for unusual noises and/or vibrations
- identify and describe maintenance requirements, including the ability to assess the urgency of the maintenance issue, recognise common types of maintenance requirements and run basic checks according to workplace procedures to confirm the need for and type of maintenance support required
- take action to address maintenance requirements, such as carrying out routine maintenance within level of skill and responsibility and/or reporting outstanding maintenance to appropriate personnel using the required forms or request system
- plan and schedule maintenance within level of responsibility, such as consulting affected personnel and/or work areas on timing and notifying of maintenance progress
- prepare equipment and work area for routine maintenance, including cleaning equipment prior to carrying out maintenance and confirming that equipment is safe to work on, and simple isolation or tag out of equipment as required by workplace procedure
- select and use hand tools as required to carry out maintenance task
- select relevant parts and materials as required to carry out maintenance task
- carry out routine maintenance tasks according to workplace procedures
- on completion of maintenance tasks, return equipment to operational order, including confirming that all equipment parts, nuts and bolts are accounted for and correctly tightened, and where required, cleaning and sanitising equipment
- store tools in designated location, including basic tool maintenance, such as oiling
- complete records of maintenance as required

REQUIRED SKILLS AND KNOWLEDGE

- maintain work area to meet housekeeping standards
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- system in place to manage maintenance of plant and equipment in the workplace, including programs, such as responsive, preventative and proactive maintenance as appropriate
- responsibilities for participating in the maintenance program, including scope of operator responsibilities, roles of others involved in plant and equipment maintenance and procedures for raising maintenance orders where requirements are outside operator role
- basic operating principles of equipment to be maintained
- signs and symptoms of faulty equipment and early warning signs of potential problems
- basic checks used to confirm the nature of maintenance requirements, including distinguishing between mechanical and electrical faults and identifying probable causes or conditions that may increase maintenance requirements of equipment used
- procedures for issuing, maintaining and storing tools used
- safe use of hand tools and measuring instrumentation relevant to maintenance responsibilities
- lubrication requirements, including requirements to use food grade lubricants as required and consequences of using incorrect type or amount of lubricants
- safe work procedures, including appropriate signage of maintenance activities as required, use of appropriate personal protective clothing and equipment, and awareness of safety hazards and controls relating to maintenance tasks
- methods used to render equipment safe to work on or clean including lock out/tag out and isolation procedures (in some cases this may involve liaising with other maintenance operators)
- procedures and inspections to be carried out to confirm that equipment is in operating order and all parts are accounted for
- food safety risks arising from poor personal hygiene, cleaning and housekeeping practices and procedures associated with routine maintenance
- maintenance planning, scheduling and recording procedures

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify routine maintenance tasks for machine or equipment • monitor operation and identify need for maintenance tasks • schedule maintenance tasks and communicate requirements with affected personnel • select and use appropriate hand tools to undertake routine maintenance • assess readiness for returning machine or equipment to operation or referring for further attention • complete maintenance documentation • apply safe work practices and identify OHS hazards and controls.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment • tools, equipment and supplies used in minor routine preventative maintenance • routine maintenance and lubrication schedules and procedures • equipment to be maintained • housekeeping standards and procedures • maintenance information recording system and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over

EVIDENCE GUIDE**assessment**

a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Routine maintenance

Routine maintenance is carried out according to company policies and procedures, licensing requirements, legislative requirements and industrial awards and agreements

Workplace information

Workplace information may include:

- standard operating procedures (SOPs)
- specifications
- production log books
- routine maintenance schedules
- manufacturers' advice
- condition monitoring information

Typical routine maintenance tasks

Typical routine maintenance tasks will depend on the workplace and may include:

- replacement of consumable components, such as O-rings, hoses, filters and other 'bolt-on/bolt-off' equipment parts
- lubrication of equipment and maintenance of fluid levels
- simple adjustment, alignment or attachment of equipment components, parts, guides and sensors
- clearing blocked nozzles, such as glue nozzles
- positioning/attaching equipment components
- carrying out basic maintenance on video inkjet

RANGE STATEMENT	
	machines
Tools and materials	Tools and materials depend on the maintenance function and may include: - a limited range of hand tools, such as spanners and screwdrivers, grease guns, Allen keys and measuring and alignment equipment Materials may include: - lubricants and consumables for video inkjet printers
Inspections of equipment	Inspections of equipment may be carried out: informally or as part of a structured program associated with proactive maintenance

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2013A Apply sampling procedures

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to understand the requirements of sampling plans, and to collect and transfer samples to retain sample integrity.

Application of the Unit

Application of the unit	This unit has application in a food production environment. Operators requiring this competency would typically be required to follow specific sampling procedures, such as aseptic sampling. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply and reference to food safety is replaced by GMP.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for sampling	1.1. Sampling requirements are identified in accordance with the sampling plan 1.2. Sampling equipment, containers and labels are prepared
2. Collect samples	2.1. Samples are collected according to sampling procedures and the requirements of the sampling plan 2.2. Samples are handled and prepared to preserve sample and source integrity 2.3. Defects or abnormalities in source material and/or sample are identified and reported 2.4. Sample information is recorded according to workplace sample recording requirements 2.5. The work area is maintained according to housekeeping standards 2.6. Work is conducted in accordance with workplace environmental guidelines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access and interpret sampling plan to identify sampling requirements
- select, fit and use personal protective clothing and/or equipment
- prepare for sampling to ensure required tools, containers and labels are available
- follow sampling procedures and the sampling plan to collect samples from the points, in the quantities and at the times specified
- identify atypical source materials and/or samples and take corrective action, such as reporting abnormalities, repeating sample collection and/or following intensive sampling schedules as required
- complete sample records according to workplace requirements, such as labelling samples as required
- transfer samples for testing
- maintain work area to meet housekeeping standards
- prepare samples according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- basic sampling principles, including the importance of following the sampling plan to obtain representative sampling reflecting characteristics of source material, the sample characteristics and related preservation, handling and storage requirements, and the labelling system purpose and requirements
- tests to be conducted on samples and related handling and preparation requirements and responsibilities
- characteristics of materials sampled and common contaminants and related conditions under which contamination is likely to occur
- sampling techniques relevant to samples collected, such as sterilisation methods and procedures
- the relationship between sampling, testing and production processes, including different sampling regimes that may apply in response to non-standard conditions or after corrective action is taken to adjust production outputs
- procedures and responsibility for reporting and recording sampling information, such as legislative requirements
- procedures for preparing samples where relevant

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • conduct pre-start checks on equipment used for collecting and handling samples • collect, handle and store samples according to sampling requirements and standards • take corrective action in response to typical defects and inconsistencies • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • apply food safety procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • sampling plan • documentation, including specifications, work instruction and other advice on sampling requirements • recording and reporting system • sampling instrumentation and containers as required • product/source material to be sampled.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Example could be: • MSL973001A Perform basic tests
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where

EVIDENCE GUIDE

possible, over a number of assessment activities.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures

Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements

Workplace information

Workplace information may include:

- standard operating procedures (SOPs)
- specifications
- production schedules and instructions
- manufacturers' advice
- sampling plans

Sampling requirements

Sampling requirements include:

- sampling under standard conditions
- sampling after processes are adjusted in response to variation or non-conformance

Sampling

Sampling typically occurs at a number of points and using a range of techniques

Maintenance of sample integrity

Maintenance of sample integrity may be achieved by:

- use of appropriate personal protective clothing
- use of clean sampling tools and containers (sterilised tools/containers for aseptic sampling)
- temperature control
- addition of preservatives as required

RANGE STATEMENT**Sampling techniques**

Sampling techniques may include:

- sub-sampling

Unit Sector(s)**Unit sector**

Operational

Competency field**Competency field****Co-requisite units****Co-requisite units**

FDFOP2015A Apply principles of statistical process control

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to collect statistical information and analyse and interpret data in order to inform work processes.

Application of the Unit

Application of the unit	This unit has application where some data collection and interpretation is required to inform work practices. This typically includes plotting data on charts, such as run or control charts, and identifying variation according to given limits.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFOP2061A	Use numerical applications in the workplace

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Collect statistical information	1.1.Data requirements are identified 1.2.Data is collected to meet requirements
2. Analyse and interpret data	2.1.Data is analysed to identify variation 2.2.Trends in data are identified 2.3.Corrective action requirements are determined based on data

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
Ability to: - identify and collect required data - retrieve/access data, which may require use of computer programs to access and analyse data, and the ability to locate the relevant information or screens to collect and analyse the data - apply basic statistical analysis techniques to meet work requirements, such as plotting data on charts (e.g. run or control charts) and identify variation according

REQUIRED SKILLS AND KNOWLEDGE
to given limits • interpret data to identify trends (manually or using a computer program) • determine when corrective action is required, such as identifying upper and lower control limits (and warning limits where relevant)
Required knowledge
Knowledge of: • data sampling method, including the nature of the sample on which data is based and the reasons for different sampling requirements that may apply in a given situation • concept of variation, including the difference between common and special causes of variation and consequent options for reducing variation and remaining within a given range • the purpose and process of establishing targets and limits • concept of standard distribution/standard deviation • methods used to analyse statistical data, including methods to determine the average, median and mean, and what these measures indicate

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify data for collection and requirements for ensuring accuracy • interpret data • document data on charts, graphs or required workplace format • identify need for corrective action.
Context of and specific resources for	Assessment must occur in a real or simulated workplace

EVIDENCE GUIDE	
assessment	where the assessee has access to: • statistical process control data • related data collection and analysis systems • calculator.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Data collection	Data collection may be based on a sampling regime followed by an operator or collected automatically. Data collection may include: • collecting samples and taking measurements
Data analysis	Data analysis typically involves: • use of computer programs but may also be carried out manually

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2016A Work in a food handling area for non-food handlers

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to conduct work in a food handling area where the work does not involve direct food contact.

Application of the Unit

Application of the unit	Typical applications for this unit include stores/warehousing, cleaning and maintenance workers. This unit is not appropriate for a person who has direct contact with food and/or raw materials or ingredients. Where this is a requirement, refer to relevant core food safety units. This unit is based on and equivalent to the guideline food safety unit GFSWFHAA Carry out work in a food handling area.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Maintain food safety while working in a food handling area	1.1. Food safety requirements related to work tasks are identified and followed 1.2. Work responsibilities are carried out so that the safety of food is maintained 1.3. Procedures or practices which are not consistent with workplace food safety program are identified and reported
2. Maintain food handling area in clean and orderly state	2.1. Equipment and the food handling area meet the cleaning and sanitation requirements of workplace food safety program 2.2. Work is conducted in accordance with workplace environmental guidelines 2.3. Waste is collected and disposed of according to workplace procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access and apply workplace information on food safety policies and procedures relating to own work
- fit and use appropriate personal protective clothing and equipment as required by work tasks to meet food business requirements
- maintain personal conduct consistent with workplace requirements
- check own work area to identify food safety hazards
- carry out work responsibilities to ensure that food safety is not compromised
- take necessary precautions when moving between or around the workplace and/or from one task to another to minimise the risk of contamination
- recognise and report situations or procedures that could compromise food safety according to workplace procedure, including following procedures in own work and related work area to report to the appropriate personnel, in required detail and in a timely manner
- take corrective or preventative action within level of responsibility
- report health conditions and illness as required by workplace food safety procedures
- sort and dispose of waste as required by work responsibility according to workplace procedure
- maintain housekeeping standards in work area
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- food safety requirements related to own work as determined by the workplace
- sources of advice on food safety issues and responsibilities in the workplace
- personal hygiene practices and clothing and footwear requirements associated with working in and moving in and between food handling areas and moving between food handling and non food-handling areas
- suitable standard for materials and equipment used in the food handling area, including materials that are unsuitable for use, such as breakable or dirty equipment/materials
- methods and procedures to be followed when carrying out work responsibilities in a food handling area to ensure that food safety is not compromised (this will depend on the nature of work responsibilities and food safety requirements as

REQUIRED SKILLS AND KNOWLEDGE

- specified by the workplace)
- the types of contamination that can occur as a result of work activities, and procedures used to prevent these types of contamination from occurring
- cleaning and sanitation requirements and responsibilities, including cleaning methods appropriate to a food handling environment and those used in the specific food handling area
- waste collection, recycling and handling procedures
- housekeeping standards to be maintained in the work area

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify food handling procedures and food safety issues for work
- apply food safety procedures when handling food products
- identify and act on non-conformances
- ensure cleaning standards are met
- follow environmental and waste management procedures.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- food safety policies and procedures relevant to work function
- work procedures, including procedures for entering and exiting food handling areas
- work process and related services/resources
- work area and related equipment to undertake work function

EVIDENCE GUIDE	
	- waste collection, treatment, recycling and/or disposal methods - monitoring and reporting system.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company policies and procedures, regulatory and licensing requirements, legislative requirements, site licences and industrial awards and agreements
Workplace information	Workplace information may include: - standard operating procedures (SOPs) - advice on food safety requirements related to work function - standard forms - written or verbal instructions
Food handling area	Food handling area can refer to any work area where receiving, handling and inspecting, preparing, processing, packaging, storing and/or despatching occur
Examples of contamination that	Examples of contamination that can result from

RANGE STATEMENT	
can result from work activities	work activities include: - chemical contamination which could be caused by lubricants, resins and cleaning and sanitation chemicals - physical contamination which could be caused by metal, glass, plastic and cloths
Personal hygiene, clothing and footwear and requirements	Personal hygiene, clothing and footwear and requirements to report health conditions or illness must meet workplace requirements and procedures. At a minimum such procedures must ensure that any person in a food premises does not contaminate food, does not have unnecessary contact with ready-to-eat food and does not spit, smoke or use tobacco or similar in a food handling area. Refer to Food Safety Standard 3.2.2, Clause 17:3 and relevant state and territory regulations/legislation

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2030A Operate a process control interface

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to operate a computer-based interface to modify and/or interrogate a control system.

Application of the Unit

Application of the unit	This unit typically targets skills required by a production worker to operate equipment using process control interface. Work may require the ability to work within a team environment

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Navigate the process control interface	1.1. The readiness of the control interface and related components for operation are confirmed 1.2. Hardware provided is used to operate the interface 1.3. Page links are used to move between screens 1.4. Messages and alarms are acknowledged 1.5. Required information is accessed from screen displays 1.6. Interface system malfunctions are recorded and reported in accordance with workplace procedures
2. Use interface system to operate and maintain a process within required parameters	2.1. Individual items of equipment and/or processes are started, monitored and shutdown using the control interface 2.2. Equipment is selected, status altered and settings entered to meet operating requirements 2.3. Sequences are activated to initiate process operation 2.4. Equipment giving a bad signal or bad measurements is recognised and responsive action taken
3. Analyse data to predict and control performance	3.1. Trends are selected and analysed to identify performance patterns 3.2. Causes of abnormal or unacceptable performance are identified and corrective action taken 3.3. Information is recorded as required

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- use all hardware components to operate the control interface
- navigate the system to locate and use information required, including moving between screens and locating relevant performance data
- operate the control system using the interface, including start up and shut down equipment components and change set points as required
- locate sensors and instrumentation providing input signals to the control system and confirm operating order within level of responsibility
- recognise and respond to error messages and alarms as required
- access relevant performance data using the control system, including locating and interpreting performance trend information
- record log information using the interface system according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- processes and equipment being controlled, including required processing sequences
- operating principles of process control and interface system, including the relationship between control panels, systems and the physical equipment, and where relevant understanding of the operating conditions required for accurate information input from sensors and related instrumentation
- action required to respond to error messages and alarms
- typical faults that can occur when operating a process control interface and corrective action required
- performance data collected by the control interface system and its application to troubleshoot performance, including the ability to identify and investigate related trend data to track cause and effect
- recording requirements and responsibilities

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- operate and navigate interface to access, retrieve, enter and store work data
- start, operate, monitor and shut down process equipment
- control and adjust equipment using control interface to achieve production requirements
- recognise faults and inconsistencies and take corrective action
- complete workplace records as required
- apply safe work practices and identify OHS hazards and controls.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- process control interface hardware and software
- work station or equipment to be controlled
- operating procedures and related advice on equipment operation
- process to be controlled
- communication systems and equipment
- workplace information recording systems, requirements and procedures.

Method of assessment

This unit should be assessed together with other core units or other units of competency relevant to the work role. This includes the relevant operational units for the process being controlled.

Guidance information for

To ensure consistency in one's performance, competency

EVIDENCE GUIDE**assessment**

should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement**RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures

Work is carried out in accordance with company policies and procedures, manufacturers' recommendations, legislative requirements, codes of practice and industrial awards and agreements

Workplace information

Workplace information may include:

- standard operating procedures (SOPs)
- manufacturers' specifications

Information accessed

Information accessed may include:

- graphics, trends
- parameter settings
- alarms
- individual plant item status

Computer-based interface

A computer-based interface may consist of:

- computer processor
- monitor
- keyboards
- track ball
- mouse
- storage devices
- printers

(It is linked to the process control system)

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2032A Work in a clean room environment

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to gown-up, enter and work in a clean room environment and de-gown to minimise contamination risks.

Application of the Unit

Application of the unit	This unit has application in a food processing production environment. It typically targets the production worker responsible for conducting work according to clean room standards.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFFS2001A	Implement the food safety program and procedures OR
	FDFPH2001A	Apply Good Manufacturing Practice procedures

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to enter a clean room environment	1.1. Appropriate clothing and footwear are identified and available 1.2. Clothing and footwear are correctly fitted and inspected prior to entering a clean room 1.3. Hand washing and disinfecting procedures are followed according to workplace procedure
2. Work in a clean room environment	2.1. Workplace procedures are followed to enter a clean room environment 2.2. Work activities are conducted so as to minimise risk of contamination
3. Exit a clean room environment and de-gown	3.1. Workplace procedures are followed to exit a clean room environment 3.2. Protective clothing and footwear is removed according to workplace procedure 3.3. Work is conducted in accordance with workplace environmental guidelines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information to determine clean room work requirements
- confirm that protective clothing and footwear are appropriate for use
- follow procedures to fit and inspect protective clothing and footwear
- follow procedures to enter a clean room environment, including following appropriate hand washing, disinfecting procedures and fitting gloves as required
- conduct work in a manner appropriate to minimising risk of contamination, including following procedures for sterilising and disinfecting equipment and surfaces as required
- exit the clean room environment according to workplace procedures
- remove protective clothing and footwear in correct sequence and deposit for laundering according to workplace procedures
- complete records as required
- maintain work area to meet housekeeping standards
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- purpose and conditions required in a clean room environment, including how the clean room maintains a clean environment and related airflow systems
- preparation and handling requirements for garments and footwear worn in a clean room environment, including garment features appropriate to a clean room environment and inspection procedure to confirm clothing and footwear are fit for use prior to fitting
- inspection points to confirm that clothing and footwear are correctly fitted according to workplace procedures
- procedures to follow if garments are not fit for use
- clean room control measures and related monitoring requirements, such as pressure differences between the clean room and change room and knowledge of location of pressure gauges, and checking operating conditions of ventilation systems where required
- entry procedures
- requirements for conducting work in a clean room and consequences of not complying with these requirements (typically work is conducted slowly to minimise disturbance of particulates)

REQUIRED SKILLS AND KNOWLEDGE

- procedures to follow to minimise risk of contamination including cleaning, sanitation, sterilisation and disinfecting of equipment and surfaces
- conditions which can cause contamination, and control measures to avoid this occurring
- occupational health and safety (OHS) hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- procedures for exiting and de-gowning
- laundering requirements and procedures
- housekeeping requirements for work area
- recording requirements and procedures

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- prepare to work in a clean room environment through the correct application of required clothing and footwear
- conduct work according to clean room work standards
- follow hand washing procedures
- exit room according to clean room standards
- apply safe work practices and identify OHS hazards and controls.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- protective clothing, footwear and equipment appropriate to a clean room
- work procedures relevant to working in a clean room environment, including those specific to entering and

EVIDENCE GUIDE	
	exiting the clean room and to carrying out the relevant work function • a clean room environment • documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out according to company policies and procedures, licensing requirements, legislative requirements, and industrial awards and agreements. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply and reference to food safety is replaced by GMP
Workplace information	Workplace information may include: • standard operating procedures (SOPs) • specifications • production schedules and instructions • manufacturers' advice • standard forms and reports
Clean room	A clean room refers to any environmentally graded

RANGE STATEMENT	
	work area
Multiple gowning processes	Multiple gowning processes may be required
Protective clothing and footwear	Protective clothing and footwear are fit for purpose and appropriate to a clean room environment

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2061A Use numerical applications in the workplace

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This is unit of competency covers the skills and knowledge required to apply basic mathematical functions of addition, subtraction, multiplication and division to undertake workplace calculations or to estimate approximate answers when exact calculations are not required.

Application of the Unit

Application of the unit	This unit has application in a production environment where basic mathematics may be required to undertake or support work processes. Typical applications of mathematical concepts in the workplace include but are not limited to measuring or estimating product characteristics, such as weight, capacity, time and temperature; measuring and estimating material usage, quantities and ratios; measuring equipment and processing parameters, such as speed/throughput; and calculating entitlements, such as pay, leave entitlements, and shift allowances. The unit requires both calculation and estimation skills with the choice between calculation and estimation dependent on the particular process and sector.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Apply basic mathematical concepts to calculate workplace information	1.1. Calculation requirements are identified and appropriate method is selected 1.2. Data is obtained from relevant sources and interpreted correctly. 1.3. Calculations are undertaken using addition, subtraction, multiplication and division to support work role
2. Apply basic mathematical concepts to estimate workplace information	2.1. Estimation requirements are identified and appropriate estimation method is selected 2.2. Data is obtained from relevant sources and interpreted correctly. 2.3. Estimations are made to meet work requirements

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify whether a calculation or estimation is required to meet workplace requirements
- carry out calculations involving basic addition, subtraction, division and multiplication to support work role (this may involve use of a calculator and conversion tables where required)
- use estimation techniques to check quantities, ratios, speed and other required data estimates
- use estimation techniques to check calculated results and workplace data
- record calculations and measurement information accurately according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- mathematical processes, including addition, subtraction, multiplication and division
- application of calculation and estimation techniques to meet work requirements
- units of measurement used in the workplace, including whole numbers, fractions and decimals (to one decimal point) (this may include use of conversion charts)
- representation of numerical information relevant to work requirements, such as charts, graphs and tables
- recording requirements and responsibilities where relevant

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

EVIDENCE GUIDE	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify calculation or estimation requirements • carry out calculations involving basic addition, subtraction, division and multiplication • where estimations are used, estimated amounts must be consistent with process or product specification and demonstrate knowledge of measurement units used in the workplace • use estimation techniques to check calculated results and workplace data.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • work tasks requiring simple estimation and calculation • conversion tables, calculators and measuring instruments where required • workplace forms/documents used for recording data where required.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role. Example could be: • FDFOP2015A Apply principles of statistical process control.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Calculations	Calculations may include: - the use of whole numbers, decimals, fractions and percentages Calculations may be made: - manually or using calculators and other measuring instruments as appropriate to the task
Estimations	Estimations can be used where the workplace tasks require only an approximate judgment of an amount, ratio, speed, and so on. Estimations can be made from: - observations of other amounts or measurements - supplied data, such as volume or weight information on packaging of raw materials
Conversion charts	Conversion charts are those in common use in the workplace
Results	Results may or may not be recorded depending on workplace requirements
Numerical information	Numerical information may be presented in forms, including: - simple run charts - graphs

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2063A Apply quality systems and procedures

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to apply quality principles and system requirements when carrying out work responsibilities where work involves the operation of packaging and/or processing equipment.

Application of the Unit

Application of the unit	This unit has application in a food processing environment. It typically targets the production worker responsible for applying quality standards to work operations. Note that this unit does not apply to the pharmaceutical industry. Refer to FDFPH2001A Apply Good Manufacturing Practice procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Monitor quality of work outcome	1.1. Quality requirements are identified 1.2. Inputs are inspected to confirm capability to meet quality requirements 1.3. Work is conducted to produce required outcomes 1.4. Work processes are monitored to confirm quality of output and/or service 1.5. Processes are adjusted to maintain outputs within specification
2. Participate in maintaining and improving quality at work	2.1. Work area, materials, processes and product are routinely monitored to ensure compliance with quality requirements 2.2. Work is conducted in accordance with workplace environmental guidelines 2.3. Non-conformance in inputs, process, product and/or service is identified and reported according to workplace reporting requirements 2.4. Corrective action is taken within level of responsibility, to maintain quality standards 2.5. Quality issues are raised with designated personnel

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access and apply workplace information on quality requirements for own work
- identify control points or inspection points for own work and related methods used to monitor quality
- maintain quality of own work, including relevant checks and inspections where required in order to monitor control points and check and inspect equipment, materials, product, packaging consumables, processing conditions and service standards relevant to own work
- identify and correct variation within boundaries of work role, and use quality data where required
- determine when and how to make adjustments to maintain output within specified parameters
- identify and respond to out-of-specification or unacceptable inputs and/or outputs
- record quality data in required format
- conduct tests related to work responsibilities according to enterprise procedures
- collect samples as required by sampling regime according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- quality policy, procedures and responsibilities
- quality system used in the workplace, including the relationship between the quality system and food safety program, sources of information on quality requirements, the role of internal and external auditors, as appropriate, and performance improvement processes
- basic concepts of quality assurance including hazards, risk assessment and control methods
- requirements of internal and external customers
- control points for own work, including the purpose of the control point, the risk if not controlled and the method of control used
- monitoring, testing and inspection procedures relating to process control requirements
- scope to correct/control variation within equipment and process capacity

REQUIRED SKILLS AND KNOWLEDGE

- parameters
- evidence of out-of-specification or unacceptable performance
- procedures for responding to out-of-specification or unacceptable performance/outcomes, including procedures for identifying or isolating materials or product of unacceptable quality
- systems used to trace product ingredients as relevant to own work
- requirements to report and record quality information
- sampling and test methods and procedures where relevant

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify quality requirements and key elements of the quality system
- conduct work according to quality standards
- monitor quality and identify and act on non-compliances
- participate in identifying quality system improvements.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- quality policy, system and procedures, including company codes of practice/Good Manufacturing Practice (GMP)
- work tasks and responsibilities
- workplace information relating to work tasks, including specifications, work instruction and other advice on quality requirements and procedures
- sampling and test procedures and related equipment

EVIDENCE GUIDE	
	as required • systems for recording quality information.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role. Examples could be: • FDFFS2001A Implement the food safety program and procedures • FDFOP2013A Apply sampling procedures • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company policies and procedures, licensing and regulatory requirements, legislative requirements and industrial awards and agreements
Workplace information	Workplace information may include: • standard operating procedures (SOPs) • quality specifications • food safety plans • log sheets • standard forms and reports
Control points	Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) as well as

RANGE STATEMENT	
	quality and regulatory control points
Monitoring quality	Monitoring quality includes observation and other checks, tests or inspections to confirm that the work output meets defined specifications or quality standards. This can include the use of data collection and analysis tools, such as control charts. Tests or inspections may be carried out by the operator, a third party or be automated
Reporting and recording systems	Reporting and recording systems may be: • verbal • written • electronic • screen-based
Participating in improvement	Participating in improvement may involve: • participation in structured improvement programs • one-off projects • day-to-day problem solving

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP2064A Provide and apply workplace information

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to identify, collect and provide information to convey meaning to others.

Application of the Unit

Application of the unit	This unit typically targets the worker responsible for applying basic communication skills and providing information to support work practices. Information is previously generated and may be in a written or verbal form. Information can include data, charts, instructions, operating procedures, codes, production information, and simple reports (e.g. a breakdown report). Information can be provided to other members of a team, a supervisor, or maintenance staff. Communication skills include verbal and non-verbal methods and basic literacy according to the level of work information needs.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Provide and apply information to suit workplace and audience requirements	1.1. Information requirements for work operations are identified 1.2. Information is collected and assessed 1.3. Information is selected and structured in a logical way to convey meaning to others 1.4. Appropriate methods are used to communicate effectively with others
2. Respond to information requests	2.1. Information requests are processed promptly and courteously 2.2. Effective listening and verbal communication skills are applied to obtain information 2.3. The nature of requests is clarified 2.4. Appropriate information is provided in response to requests 2.5. Information is provided in a form appropriate to the enquirer 2.6. Requests are referred to the appropriate personnel where they fall outside area of responsibility
3. Use and maintain workplace	3.1. A range of information sources is accessed to support work requirements

ELEMENT	PERFORMANCE CRITERIA
information	3.2. Information is recorded in appropriate formats according to workplace reporting requirements 3.3. Work is conducted in accordance with workplace environmental guidelines 3.4. Information is analysed to meet work requirements 3.5. Effective listening and verbal communication skills are applied to exchange information

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify and access information to undertake work responsibilities
- seek information from people in the workplace to support work roles and responsibilities
- ascertain or clarify information requirements by asking questions
- prepare simple written or verbal presentations that structure and present information in a logical sequence
- present information appropriate to audience and information purpose, such as use of graphs and/or diagrams as appropriate (the audience may include people from diverse cultural backgrounds and with people with limited ability to speak or understand English)
- participate with others to achieve work outcomes using interactive communication processes
- participate in group discussions and processes as required, including demonstrating active listening skills and participating constructively in discussions
- respect and, where appropriate, represent the views of others
- record information in required format/s
- apply effective listening, questioning and verbal skills
- apply reading and writing skills to the level required by work operations
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- communication channels, including consultative arrangements established in the

REQUIRED SKILLS AND KNOWLEDGE

- workplace
- common colloquial and technical terms relating to work function
- sources of information and advice relating to work responsibilities
- methods and technologies used to access, record and store workplace information, including print, and screen-based systems as relevant to the workplace
- presentation techniques to convey information on a range of typical workplace subjects appropriate to the audience
- recognition of different personal communication styles and appropriate communication options
- recognition of cultural diversity as appropriate in the workplace
- reporting roles and responsibilities
- interpersonal skills including active listening, questioning, seeking and responding to feedback
- basic meeting procedures to identify and achieve meeting/discussion outcomes

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- use, interpret and apply work-related information presented in a variety of forms
- select and apply communication methods to present information to others
- respond to information requests
- record and maintain information in required work formats.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- advice on work roles and responsibilities

EVIDENCE GUIDE	
	- opportunities to interact with others using typical workplace communication processes - typical group forums, such as work groups and committees - typical workplace information - information systems and procedures - standard forms and equipment (as required) for recording workplace information.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role. Examples could be: - FDFOP1007A Participate effectively in a workplace environment - FDFOP2005A Work in a socially diverse environment - TLIK107C Use infotechnology devices and computer applications in the workplace.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Workplace information	Workplace information may include: - standard operating procedures (SOPs) - specifications - production schedules and instructions - signs and symbols - materials safety data sheets (MSDS)

RANGE STATEMENT	
	• manufacturers' advice • standard forms and reports
Information to be accessed/conveyed	Information to be accessed/conveyed may be verbal, written and/or screen based and may include: • symbols • charts • signs • data • instructions • pictures and diagrams as relevant to own work
Typical subjects for communication	Typical subjects for communication include: • work functions • shift handovers • company policies and codes of practice • rights and responsibilities • procedures • employment conditions and entitlements
Interactive communication processes	Interactive communication processes include: • active listening • turn taking • questioning and tolerating the views of others • seeking and providing constructive feedback
Recording and/or accessing information electronically	Recording and/or accessing information electronically does not require an understanding of the programs used and the function involves limited interaction, such as simple keyboard operations.

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP3002A Set up a production or packaging line for operation

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to set up multiple production or packaging processes and/or conduct multiple process changeovers for operation by others.

Application of the Unit

Application of the unit	This unit is appropriate where setup and/or changeovers are not carried out by the equipment or process operator. This unit has application in a food processing production environment. It typically targets the production worker responsible for machine setup.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for line setup	1.1. Materials are confirmed and available to meet production requirements 1.2. Equipment and related accessories are confirmed, available and fit for use to meet production requirements 1.3. Tools and equipment required for line setup are available, operational and fit for use 1.4. Processing parameters and settings are identified to meet production or packaging requirements
2. Set up the line for operation	2.1. Cleaning and maintenance requirements and status are identified and confirmed 2.2. Equipment is inspected to confirm condition 2.3. Machine settings are selected or adjusted as required to meet safety and production requirements 2.4. Processing or packaging parameters are entered as required to meet production requirements 2.5. Equipment performance is checked and adjusted as required 2.6. Pre-start checks are carried out as required by workplace requirements 2.7. Line setup is completed to match production or packaging schedule and operating requirements 2.8. The line is ready and safe to operate and any

ELEMENT	PERFORMANCE CRITERIA
	maintenance requirements are reported according to workplace reporting requirements 2.9. Work is conducted in accordance with workplace environmental guidelines 2.10. Relevant personnel are notified of setup completion

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access production/packing schedule and related information to identify line setup/changeover requirements, such as checking product sequencing and compatibility, confirming that the required cleaning and/or sanitation has occurred and required packaging components and consumables are available as appropriate
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary equipment and related attachments, materials and services for production
- confirm supply of necessary equipment and services to carry out setup operations
- set and/or adjust equipment to meet production/packaging requirements, including selecting the required parameters or equipment settings, and changing processing set points as required
- position safety guards and cancel isolation/lockouts ready for operation
- confirm that sensors and related feedback instruments are correctly positioned and operational
- operate equipment to confirm equipment setup and make final adjustments as required
- time setup activities to meet production requirements
- advise affected work areas/personnel of completion of setup
- maintain work area to meet housekeeping standards
- load and/or position materials/ingredients/product and/or packaging consumables according to enterprise procedures
- use the control panel/system to set and adjust equipment components according to enterprise procedures
- conduct routine maintenance according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as

REQUIRED SKILLS AND KNOWLEDGE

specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor

- work cooperatively within a culturally diverse workforce

Required knowledge***Knowledge of:***

- basic operating principles of equipment and related accessories, including equipment adjustment points, range and location/alignment requirements of sensors and related feedback instruments, and status and purpose of guards
- operating capacities of equipment used in the work area, such as different types of equipment and/or components as required by processing operations
- nature of setup/changeover requirements, such as product compatibility and related cleaning requirements, impact of variation in materials or product on setup requirements, equipment and/or attachment changeovers related to given products
- typical equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- pre-start checks required by setup/changeover
- related processes and personnel dependent on line setup, and communication responsibilities
- isolation, lock out and tag out procedures and responsibilities
- occupational health and safety (OHS) hazards and controls
- procedures and responsibility for reporting equipment performance information
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- routine maintenance requirements and procedures where relevant

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and

Evidence of ability to:

EVIDENCE GUIDE	
evidence required to demonstrate competency in this unit	• conduct pre-start checks on machinery used for production to determine cleaning, maintenance and operation readiness • determine production parameters and requirements • set up line according to production requirements • take corrective action in response to typical faults and inconsistencies • complete workplace records and communicate line status with other personnel as required • apply safe work practices and identify OHS hazards and controls • safely shut down equipment • apply food safety procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment • production/packaging schedule and related advice on setup/changeover requirements • cleaning records/clearance as required • information on equipment capacity and operating parameters • process/packaging equipment and related accessories and services • materials/consumables required by the process • hand tools as required.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2011A Conduct routine maintenance • FDFOP2030A Operate a process control interface.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: - the Food Standards Code, including labelling, weights and measures legislation - legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Food Standards Code and reference to food safety is replaced by GMP
Workplace information	Workplace information may include: - standard operating procedures (SOPs) - specifications - production schedules and instructions - standard forms and reports
Equipment adjustment	Equipment adjustment may include: limited use of hand tools, such as Allen keys and screwdrivers, within level of responsibility
Confirming cleaning requirements and status	Confirming cleaning requirements and status may involve: accessing cleaning records

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP3003A Operate interrelated processes in a production system

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to set up, operate and adjust interrelated processes in a production system.

Application of the Unit

Application of the unit	This unit applies to senior operators who are applying skills and knowledge of the operational requirements of the production system for the industry in which it is applied. While the unit does not have specific prerequisites, it is not an entry level unit covering skills and knowledge required for operation of individual items of equipment and individual processes. The unit instead provides the skills and knowledge required for the coordination of multiple processes in a production system at an operational level. Where sector-specific senior operator technical skills are required, a relevant sector specific specialist elective unit should be selected. A system typically involves a series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome. Individual processes may be directly operated, automated and/or operated by others. System operation requires higher level planning and problem solving skills applied to the series of processes than is required when operating an individual unit of equipment or multiple pieces of the same equipment. This unit does not supply skills related to the implementation of lean and competitive manufacturing

	related skills to improve system performance. Where these skills are required the relevant Manufacturing Skills Australia (MSA) competitive manufacturing elective units should be selected.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare the production system for operation	1.1. Equipment, materials and services are confirmed and available to meet production requirements 1.2. Cleaning requirements and equipment status are

ELEMENT	PERFORMANCE CRITERIA
	identified and confirmed 1.3. Machine settings are selected or adjusted as required to meet safety and production requirements 1.4. Processing/operating parameters are entered as required to meet production requirements 1.5. Materials, ingredients and/or product are loaded or positioned as required to meet production requirements 1.6. Pre-start checks are carried out as required by workplace requirements 1.7. Equipment performance is checked and adjusted as required 1.8. Equipment is ready and safe to operate
2. Operate and monitor the production system	2.1. The system is started up and operated according to company procedures 2.2. System equipment components are monitored to identify variation in operating conditions 2.3. Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements 2.4. The production system is monitored to confirm that specifications are met 2.5. Out-of-specification product/process outcomes are identified, rectified and/or reported to maintain the process within specification 2.6. The work area is maintained according to housekeeping standards 2.7. Work is conducted in accordance with workplace environmental guidelines
3. Hand over production system operation	3.1. Workplace records are maintained according to workplace recording requirements 3.2. Handover is carried out according to workplace procedures 3.3. Process operators are aware of system and related equipment status at completion of handover
4. Shut down the production system	4.1. The appropriate shutdown procedure is identified 4.2. The system is shut down according to workplace procedures 4.3. Maintenance requirements are identified and reported
5. Contribute to continuous	5.1. System performance is reviewed against output

ELEMENT	PERFORMANCE CRITERIA
improvement of the production system	plan/targets 5.2.Opportunities for system improvement are identified and investigated 5.3.Proposals for improvement are developed and implemented within company planning arrangements, authority levels and according to company procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access production schedule and related information to identify system output and operating requirements, such as planning daily production schedules and/or modifying plans to respond to operating conditions and customer requirements
- liaise with relevant work areas to confirm and/or secure necessary materials, services, equipment and labour to meet production requirements
- confirm supply of necessary equipment and related attachments, materials and services
- select, fit and use personal protective clothing and/or equipment
- set and/or adjust equipment to meet process output requirements, including inspecting equipment condition to identify any signs of wear, confirming selection of appropriate settings and/or related parameters, ensuring that isolation or lock outs are cancelled as required, confirming that equipment is clean and correctly configured for processing requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational (checks may be done by the system operator or involve observing/supporting others setting and adjusting equipment and conducting pre-start checks)
- load and/or position materials, ingredients and/or product as required
- operate and monitor the production system, such as use of a process control system and/or observing/supporting others to follow correct operating procedures
- monitor materials flow and work-in-progress through the system
- confirm that the system operates within specified parameters and inspection/control points are monitored
- determine responses to out-of-specification results or non-conformance within level of responsibility

REQUIRED SKILLS AND KNOWLEDGE

- monitor operating efficiencies of the system, including recognition of signs and symptoms of faulty equipment and early warning signs of other potential problems
- investigate, resolve and/or report problems and faults
- plan scheduled events to minimise disruption to production
- conduct/coordinate product or batch changeovers
- conduct/coordinate shift handovers
- review and maintain procedures to support system improvements
- maintain work area to meet housekeeping standards
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- purpose and basic principles of the production system, including the system process flow, the interrelationships of each process to identify the impact of variation on related processes, and optimisation options
- basic operating principles of equipment and related accessories used by the system, including equipment adjustment points, status and purpose of guards, and range and location/alignment requirements of sensors and related feedback instruments
- operating capacities of equipment used in the system, such as different types of equipment and/or components as required by processing/packaging operations
- related systems and responsibilities for interaction, such as related production systems, services supply, packaging/warehousing, maintenance, laboratory/quality assurance and planning and scheduling
- product characteristics and common types of variation in materials and/or ingredients used, including the effect of variation on each stage of the system and scope to adjust or correct
- typical production related problems, including equipment faults, common causes and warning signs, incorrect or poor supply of materials, incorrect settings and poor operator control
- relevant procedures, specifications and operating parameters for the system and the individual processes
- isolation, lock out and tag out procedures and responsibilities
- hazards, risks, controls and methods for monitoring processes within the system, including occupational health and safety (OHS), food safety, quality and environmental hazards and risks
- workplace system and approach to equipment maintenance
- process improvement procedures and related consultative arrangements
- troubleshooting procedures and problem solving techniques
- communication responsibilities to inform related work areas/support functions and

REQUIRED SKILLS AND KNOWLEDGE

- other shifts of operational status and production issues
- procedures and responsibility for reporting production and performance information

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- conduct pre-start checks on production system components
- confirm machine setup is ready to achieve production requirements
- correctly use required personal protective equipment
- start, operate, monitor and adjust process equipment throughout the system to achieve required quality outcomes
- identify system problems and take corrective action
- conduct operational handovers
- shut down system
- identify and investigate opportunities for operational improvements within areas of responsibility
- complete workplace records as required
- apply safe work practices and identify OHS hazards and controls
- safely shut down equipment
- apply food safety procedures.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- personal protective clothing and equipment

EVIDENCE GUIDE	
	• production schedule and related advice on system requirements • information on equipment capacity and operating parameters • production system equipment and related accessories and services • materials/consumables required by the process • communication and recording systems and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2030A Operate a process control interface • FDFPPL3003A Support and mentor individuals and groups.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: • the Food Standards Code, including labelling,

RANGE STATEMENT	
	weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Food Standards Code and reference to food safety is replaced by GMP
Workplace information	Workplace information may include: • standard operating procedures (SOPs) • specifications • production schedules and instructions • performance records and reports
Systems	A system typically involves: • a series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome
System operation	System operation may involve: • coordination of operators of system components
Handovers	Handovers may be done: • in person or via recording/communication systems according to workplace arrangements
Operation and monitoring of equipment and system processes	Operation and monitoring of equipment and system processes typically requires: • the use of control panels and systems
Shutdown procedures	Shutdown procedures may include: • cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)
Confirming cleaning requirements and status	Confirming cleaning requirements and status may involve: • accessing cleaning records

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFOP3004A Operate interrelated processes in a packaging system

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to set up, operate and adjust interrelated processes in a packaging system.

Application of the Unit

Application of the unit	This unit applies to senior operators who are applying skills and knowledge of the operational requirements of the packaging system for the industry in which it is applied. While the unit does not have specific prerequisites, it is not an entry level unit covering skills and knowledge required for operation of individual items of equipment and individual processes. The unit instead provides the skill and knowledge required for the coordination of multiple processes in a packaging system at an operational level. Where sector-specific senior operator technical skills are required, a relevant sector specific specialist elective unit should be selected. The system will typically involve a series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome. Individual processes may be directly operated, automated and/or operated by others. System operation requires higher level planning and problem solving skills applied to the series of processes than is required when operating an individual unit of equipment or multiple pieces of the same equipment. This unit does not supply skills related to the implementation of lean and competitive manufacturing

	related skills to improve system performance. Where these skills are required the relevant Manufacturing Skills Australia (MSA) competitive manufacturing elective units should be selected.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare the packaging system for operation	1.1. Equipment, materials and services are confirmed and available to meet packaging requirements 1.2. Cleaning requirements and equipment status is

ELEMENT	PERFORMANCE CRITERIA
	identified and confirmed 1.3. Machine settings are selected or adjusted as required to meet safety and production requirements 1.4. Operating parameters are entered as required to meet production requirements 1.5. Product and/or packaging components and consumables are loaded or positioned as required to meet packaging requirements 1.6. Pre-start checks are carried out as required by workplace requirements 1.7. Equipment performance is checked and adjusted as required 1.8. Equipment is ready and safe to operate
2. Operate and monitor the packaging system	2.1. The system is started up and operated according to company procedures 2.2. System equipment components are monitored to identify variation in operating conditions 2.3. Variation in equipment operation is identified and maintenance requirements are reported according to workplace reporting requirements 2.4. The system is monitored to confirm that packaging specifications are met 2.5. Out-of-specification product/packaging outcomes are identified, rectified and/or reported to maintain the process within specification 2.6. The work area is maintained according to housekeeping standards 2.7. Work is conducted in accordance with workplace environmental guidelines
3. Hand over packaging system operation	3.1. Workplace records are maintained according to workplace recording requirements 3.2. Handover is carried out according to workplace procedures 3.3. Process operators are aware of system and related equipment status at completion of handover
4. Shut down the packaging system	4.1. The appropriate shutdown procedure is identified 4.2. The system is shut down according to workplace procedures 4.3. Maintenance requirements are identified and reported
5. Contribute to	5.1. System performance is reviewed against output

ELEMENT	PERFORMANCE CRITERIA
continuous improvement of the system	plan/targets 5.2. Opportunities for system improvement are identified and investigated 5.3. Proposals for improvement are developed and implemented within company planning arrangements, authority levels and according to company procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access production/packaging schedule and related information to identify packaging output and operating requirements, such as establishing daily packaging priorities and/or modifying plans to respond to customer requirements
- liaise with relevant work areas to confirm and/or secure necessary materials, services, equipment and labour to meet production requirements
- confirm supply of necessary equipment and related attachments, materials and services
- select, fit and use personal protective clothing and/or equipment
- set and/or adjust equipment to meet packaging requirements, such as inspecting equipment condition to identify any signs of wear, confirming selection of appropriate settings and/or related parameters, ensuring that isolation or lock outs are cancelled as required, confirming that equipment is clean and correctly configured for packaging requirements, positioning sensors and controls correctly, ensuring any scheduled maintenance has been carried out, and confirming that all safety guards are in place and operational (checks may be done by the system operator or involve observing/supporting others setting and adjusting equipment and conducting pre-start checks)
- load and/or position product, packaging components and consumables as required
- operate and monitor the packaging system, such as use of a process control system and/or observing/supporting others to follow correct operating procedures
- monitor materials flow and work-in-progress to and from the packaging system
- confirm that the packaging system operates within specified parameters and inspection/control points are monitored
- determine responses to out-of-specification packaging or non-conformance within level of responsibility

REQUIRED SKILLS AND KNOWLEDGE

- monitor operating efficiencies of the system, including recognition of signs and symptoms of faulty equipment and early warning signs of other potential problems
- investigate, resolve and/or report problems and faults
- plan scheduled events to minimise disruption to production
- conduct/coordinate product/packaging changeovers
- conduct/coordinate shift handovers
- review and maintain procedures to support system improvements
- maintain work area to meet housekeeping standards
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- purpose and basic principles of the packaging system, including the process flow and the interrelationships of each previous processes that can affect packaging outcomes, packaging technology, and packaging equipment components
- basic operating principles of equipment and related accessories used by the system, including equipment adjustment points, status and purpose of guards, and range and location/alignment requirements of sensors and related feedback instruments
- operating capacities of equipment used in the system, such as different types of equipment and/or components as required by processing/packaging operations
- related systems and responsibilities for interaction, such as related production and further packaging/storage stages, services supply, maintenance, laboratory/quality assurance and planning and scheduling
- technical knowledge of product/packaging characteristics and the main factors that impact on shelf-life
- typical packaging related problems, including equipment faults, common causes and warning signs, incorrect or poor supply of materials and finished product, incorrect settings and poor operator control
- relevant procedures, specifications and operating parameters for the system and the individual processes
- isolation, lock out and tag out procedures and responsibilities
- hazards, risks, controls and methods for monitoring processes within the system, including occupational health and safety (OHS), food safety, quality and environmental hazards and risks
- workplace system and approach to equipment maintenance
- process improvement procedures and related consultative arrangements
- troubleshooting procedures and problem solving techniques
- communication responsibilities to inform related work areas/support functions and other shifts of operational status and production issues

REQUIRED SKILLS AND KNOWLEDGE

- procedures and responsibility for reporting production and performance information

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- conduct pre-start checks on packaging system components
- confirm machine set up is ready to achieve packing requirements
- correctly use required personal protective equipment
- start, operate, monitor and adjust process equipment throughout the system to achieve required quality outcomes
- identify system problems and take corrective action
- conduct operational handovers
- shut down system
- identify and investigate opportunities for operational improvements within areas of responsibility
- complete workplace records as required
- apply safe work practices and identify OHS hazards and controls
- safely shut down equipment
- apply food safety procedures.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- personal protective clothing and equipment
- production schedule and related advice on system

EVIDENCE GUIDE	
	requirements • information on equipment capacity and operating parameters • packaging system equipment and related accessories and services • product, packaging components and consumables as required by the process • communication and recording systems and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2030A Operate a process control interface • FDFPPL3003A Support and mentor individuals and groups.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: • the Food Standards Code, including labelling,

RANGE STATEMENT	
	weights and measures legislation legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Food Standards Code and reference to food safety is replaced by GMP
Workplace information	Workplace information may include: - standard operating procedures (SOPs) - specifications - production schedules and instructions - performance records and reports
System operation	A system typically involves a series of interrelated processes that must be coordinated and concurrently operated to produce the required outcome. System operation may involve: coordination of operators of system components
Handovers	Handovers may be done: in person or via recording/communication systems according to workplace arrangements
Operation and monitoring of equipment and system processes	Operation and monitoring of equipment and system processes typically requires: the use of control panels and systems
Shutdown procedures	Shutdown procedures may include: cleaning (in some cases cleaning may be carried out by a dedicated cleaning crew)

Unit Sector(s)

Unit sector	Operational

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFPPL2001A Participate in work teams and groups

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to work effectively with others to complete work activities.

Application of the Unit

Application of the unit	This unit can apply to participation in structured teams and informal work groups.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify team objectives	1.1. Team tasks, responsibilities and performance measures are identified and agreed 1.2. Tasks required to achieve goals and performance standards are discussed and agreed
2. Participate in planning work activity	2.1. Personal work tasks and roles are negotiated to ensure team goals and performance standards are met 2.2. Information is provided to contribute to planning work group activities 2.3. Personal skills are assessed to identify match with team skill needs 2.4. Personal workload is planned to meet team goals and performance standards
3. Complete work tasks and roles to meet team requirements	3.1. Work is undertaken to achieve team goals and performance standards 3.2. Communication between team members and with other work areas is appropriate and timely 3.3. Timely requests are made for assistance as required to meet team goals and performance standards 3.4. Assistance is provided to other team members to achieve team goals and performance standards 3.5. Work is conducted in accordance with workplace environmental guidelines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify team objectives, responsibilities and performance standards
- confirm and agree on work roles and responsibilities within the team
- complete work responsibilities within agreed timelines
- assess time and other resource requirements related to achieving own work responsibilities
- identify problems and request assistance in a timely manner to achieve personal and team goals
- use communication techniques appropriate to the audience
- exchange constructive feedback with team members
- participate effectively in team processes, including working with own team members and with other teams and work areas
- support other team members to achieve team goals
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- procedures for establishing team goals and performance standards
- methods used to measure achievement of personal and team goals
- team goals and personal role in achieving work outcomes
- group processes, including basic facilitation, negotiation and conflict resolution

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.

EVIDENCE GUIDE	
	Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify team goals and expectations and personal role within the team • plan work to maximise outcomes for team • apply communication skills to engage with other participants • participate in and support the achievement of team goals.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • opportunities to participate in team processes • workplace arrangements for establishing company, workplace and team goals • methods used to measures and report on performance against targets or standards • resources required to achieve personal work requirements.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

RANGE STATEMENT	
Policies and procedures	Work is carried out in accordance with company policies and procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements
Personal and team measures	Personal measures may include: • achievement of work outcomes • performance appraisal systems Team measures may include • performance indicators
Teams	Teams refer to: • both defined teams and to work groups who interact to achieve work outcomes and/or to address a specific function or issue
Achieving team goals	Achieving team goals typically involves: • cooperation with own team members and with other teams and work areas
Workplace language	Everyday workplace language is used and may include: • commonly used technical terms
Communication systems	Communication systems reflect the culture of the workplace and the workforce. This may include: • communicating with people from diverse cultural backgrounds and with people with limited English language and literacy skills

Unit Sector(s)

Unit sector	People management/planning/logistics

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFPPL3001A Participate in improvement processes

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers to skills and knowledge required to participate in performance improvement processes that involve systematic analysis of performance to identify and propose opportunities for improvement.

Application of the Unit

Application of the unit	This unit has application in a work environment where the worker has scope to investigate and participate in improvement processes. Where structured analysis and investigation is not required to participate in improvement programs, this unit does not apply.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify opportunities for improvement	1.1.Barriers to good practice or optimal performance are identified 1.2.Scope of issue or problem to be addressed is clearly defined
2. Identify information requirements	2.1.Data required to investigate improvement opportunity is identified 2.2.Appropriate data collection methods are selected 2.3.Additional resources available to support investigation are identified
3. Analyse the issue or problem	3.1.Techniques required to investigate nature of issue or problem are selected and applied 3.2.A detailed description of the issue or problem is developed 3.3.Possible causes are identified and tested 3.4.Options for improvement are identified and assessed
4. Recommend options for improvement	4.1.Preferred options are identified and described 4.2.Recommendations are presented in formats appropriate to the issue and the audience 4.3.Recommendations are consistent with data collected and analysed
5. Participate in implementing	5.1.Improvement trials are supported 5.2.Improvement proposals are evaluated and refined

ELEMENT	PERFORMANCE CRITERIA
improvement proposals	5.3. Operating procedures are updated and communicated to reflect implementation of improved practices 5.4. Improvement in performance is monitored

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify nature and scope of improvement opportunity
- consult others to confirm improvement opportunity definition
- determine data collection requirements and appropriate collection methods
- identify resources requirements to support investigation, such as negotiating access to resources as required, and where required, identifying expertise or improvement team members
- collect data, such as collecting samples and taking measurements
- determine and apply appropriate data analysis techniques
- draw conclusions based on the data collected and analysed
- communicate findings in forms appropriate to the nature of the issue and the audience
- receive and take account of feedback
- participate in related trials and/or changes to work practices arising from improvement proposals
- monitor and document results of trials/implementation and participate in modifying change to support ongoing improvement
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- objectives to be addressed by improvement proposals, such as quality, occupational health and safety (OHS), environmental management, cost, efficiency and job satisfaction

REQUIRED SKILLS AND KNOWLEDGE

- the context in which improvement occurs, including capital expenditure and labour budgets, equipment capacity and production targets
- workplace approach to structuring improvement processes
- resources available to the workplace to support improvement processes, including both internal and external resources
- data collection and analysis techniques appropriate to the nature of the improvement opportunity and the workplace
- communication techniques to support data collection, consultation and teamwork required to participate in improvement processes
- documentation management systems to support changes in work practices to reflect improvement processes

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify opportunities for improvement and develop objectives and parameters for investigation
- plan study and data collection methods
- collect and analyse data and evidence to test ideas
- present improvement plans with evidence to support rationale
- implement and monitor improvement processes
- apply safe work practices and identify OHS hazards and controls
- ensure improvement plans reflect overall organisational objectives.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- information storage and retrieval systems

EVIDENCE GUIDE	
	• relevant technical information and personnel resources • opportunities to interact with others using typical workplace communication processes • relevant workplace documentation.
Method of assessment	This unit should be assessed together with other units of competency relevant to the work role. Examples could be: • FDFOP2015A Apply principles of statistical process control • FDFOP2064A Provide and apply workplace information • FDFPPL2001A Participate in work teams and groups • PMBQUAL390A Solve problems using quality tools.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Process improvement	Process improvement is typically investigated and developed in consultation with others
Data analysis	Data analysis typically involves: • use of computer programs but may also be carried out manually
Problem solving tools	Problem solving tools can include but are not limited to:

RANGE STATEMENT	
	• fishbone diagrams/cause and effect diagrams • workflow analysis • Pareto diagrams • SWOT analysis

Unit Sector(s)

Unit sector	People management/planning/logistics

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFPPL3002A Report on workplace performance

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to collate and maintain workplace records to enable the monitoring and reporting of workplace performance.

Application of the Unit

Application of the unit	This unit would typically apply to a team leader or person responsible for monitoring and reporting on performance of a work area or section.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify recording and reporting requirements	1.1. The purpose of recording performance-related information is identified 1.2. Recording and reporting responsibilities are identified 1.3. Recording and reporting systems and formats are identified
2. Maintain workplace information	2.1. Records are complete, timely and accurate 2.2. Performance information is recorded in required format to meet workplace reporting requirements 2.3. Errors or discrepancies in recording are identified and corrected or notified to appropriate personnel 2.4. Variances are identified, investigated and reported according to workplace procedure 2.5. Requests for information are assessed, prioritised and addressed to meet required timelines
3. Maintain security of workplace information	3.1. Access levels and authorities are identified 3.2. Security of workplace records and reports is maintained 3.3. Security breaches are identified and reported to appropriate personnel

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills***Ability to:***

- identify and use recording/reporting formats and systems
- identify information security requirements and procedures for responding to/reporting a security breach
- collect and collate information to be recorded as required
- assess information to confirm that it is complete and accurate and follow up inaccurate recording with relevant personnel
- identify significant performance variation, investigate and report cause/s
- prepare reports in required format to meet reporting timelines
- respond to information requests on a timely basis
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge***Knowledge of:***

- the purpose and responsibilities for the information records and reports to be maintained or produced, including accuracy levels and timeliness of recording and reporting
- techniques used to collate and assess information, including typical recording outcomes to identify unusual or incorrectly recorded information
- likely causes of variation and related reporting responsibilities
- information system access levels and codes, such as levels within software
- communication skills relevant to reporting role

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the

EVIDENCE GUIDE	
	assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • describe the reporting and recording systems and procedures for work area • record information on work performance in accordance with reporting procedures • report variances and inconsistencies • maintain security of work documentation.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • advice on workplace policies, codes of practice and procedures • workplace information/records • recording/reporting formats and systems.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company policies, procedures, regulatory and licensing requirements, legislative requirements and

RANGE STATEMENT	
	industrial awards and agreements
Information recorded and reported	Information recorded and reported may include but is not limited to: • collation of information recorded by others, such as timesheets, log sheets, recipes/specifications, operating procedures, production statistics, downtime, labour and materials usage levels
Recording systems	Recording systems may: • be carried out manually or involve the use of use of planning and systems control software, such as SAP and MRPII

Unit Sector(s)

Unit sector	People management/planning/logistics

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFPPL3004A Lead work teams and groups

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to plan to achieve work requirements, secure resources and monitor the outputs of a work team or group.

Application of the Unit

Application of the unit	This unit can apply to people with formal responsibility for team/group leadership and to those with occasional responsibility for this role.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Negotiate and communicate team objectives	1.1. Team goals, tasks and responsibilities are communicated and agreed with team members 1.2. Team performance standards and measures are communicated and agreed with team members
2. Plan the work activity	2.1. Individual roles and responsibilities of team members are assigned in consultation with others 2.2. Work roles are allocated to take account of team goal and the skills and expertise of each team member 2.3. Resources required to achieve work outcomes are identified and secured 2.4. Development needs of team members are identified and addressed
3. Manage team work to achieve required outcomes	3.1. Work progress is monitored against timelines and performance measures 3.2. Team members are kept informed of progress towards achieving team performance indicators 3.3. Potential barriers to achieving team goals are identified and corrective action taken 3.4. Team performance variances are identified, investigated and reported according to workplace reporting requirements 3.5. Team members are encouraged to actively contribute to team growth and development 3.6. Workplace information systems and procedures are followed to record and report on team performance

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- communicate and agree on team goals, performance standards and performance measures within the context of workplace arrangements for team or group work
- establish and secure resources, such as labour (crew levels and competency profiles) and other resources as required
- develop plans and schedules to achieve team goals, including the ability to assess impact of planning decisions on related issues, such as impact on other work areas, resource utilisation and costs
- facilitate group processes, including mediating and resolving different interests, personal and work styles as required and encouraging/providing opportunities for active participation of team members
- allocate and negotiate work roles and responsibilities in consultation with team members to match work requirements and skills and abilities of team members
- identify and address learning needs of team members
- provide a mentoring role to team members
- monitor team outputs against objectives and make adjustments as required to achieve plan
- monitor resource utilisation against plan
- provide feedback on team and individual performance according to workplace feedback procedures
- represent and advocate on behalf of the team in other workplace forums as required
- use communication techniques appropriate to the audience, such as communicating with people from diverse cultural backgrounds and with people with limited ability to speak or understand English
- record information on team performance as required
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- facilitation techniques and communication skills to support the active engagement and participation of team members in team processes
- work procedures relevant to team tasks and related occupational health and safety (OHS), food safety, quality and environmental management issues, hazards and control measures

REQUIRED SKILLS AND KNOWLEDGE

- workplace planning and performance measurement systems and processes
- methods used to measure achievement of personal and team goals
- resource allocation systems used in the workplace as appropriate to secure relevant resources required by the team or group
- work capacity, skills and knowledge of team or work group members in order to allocate roles appropriate to skill level and plan development opportunities
- competency requirements of work functions, including any special work conditions that may be covered by additional licensing or certification requirements
- duty of care when allocating work roles and responsibilities
- competency identification and training arrangements in the workplace
- communication skills required to represent and advocate on behalf of the team or work group
- stages of team development
- recording and reporting system and responsibilities

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- ensure all team members understand and agree to team goals and expectations and their personal responsibilities
- plan team activity to take into account team goals, timelines, individual capabilities and resources
- monitor outcomes against timelines and communicate progress with team members
- apply interpersonal communication skills to engage and support team members
- support positive outcomes for the individual and team.

EVIDENCE GUIDE	
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • opportunities to facilitate team processes • workplace arrangements for establishing company, workplace and team goals • methods used to measure and report on performance against target • planning processes • resource management and allocation systems as appropriate • resources required to achieve team outcomes • competency recording and workplace training arrangements.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. An example could be: • FDFPPL3003A Support and mentor individuals and groups.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements

RANGE STATEMENT	
Personal and team measures	Personal measurement can include: • achievement of work outcomes • performance appraisal systems Team measures can include: • performance indicators
Responsibility for leading a team or group	Responsibility for leading a team or group may be: • a formal or informal role • an occasional role
Teams	Teams refer to: • both defined teams and to work groups who interact to achieve work outcomes and/or to address a specific function or issue
Communication systems	Communication systems reflect the culture of the workplace and the workforce

Unit Sector(s)

Unit sector	People management/planning/logistics

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFPPL3005A Participate in an audit process

Modification History

November 2011: update to imported unit.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to participate in an internal audit process and is appropriate where internal audit processes are conducted to support externally audited programs.

Application of the Unit

Application of the unit	This unit has application where auditing occurs in an area that the person is not directly responsible for and where they are required to follow a formal, structured process. It is designed to support participation in auditing a range of programs designed to identify hazards, assess risk and implement control measures. These may include but are not limited to occupational health and safety (OHS), quality and environmental management. At this level, the person would typically work under direction and may be required to operate within established audit procedures, such as those outlined in ISO 10011. Participation implies that the person can participate in all stages of an audit but is not responsible for negotiating audit scope, allocating audit tasks to others or reporting on audit outcomes. When applied to the pharmaceutical industry, FDFPH2001A Apply Good Manufacturing Practice procedures should be selected to support the application of this unit. FDFPH2001A incorporates content covered in FDFOP2063A Apply quality systems and procedures, and can be used as an alternative to this prerequisite unit for this sector.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFOHS2001A	Participate in OHS processes
	FDFOP2063A	Apply quality systems and procedures
	MSAENV272B	Participate in environmentally sustainable work practices

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Participate in planning an audit	1.1.Roles and responsibilities for participating in the audit are identified 1.2.The purpose and scope of the audit is identified 1.3.Information and resources required to conduct the audit are identified and located
2. Participate in	2.1.Information is collected that is adequate,

ELEMENT	PERFORMANCE CRITERIA
conducting an audit	representative and meets audit requirements 2.2. Information is analysed to assess adequacy of performance against program 2.3. Records are reviewed to confirm compliance with the program 2.4. Compliance with the program is observed in the workplace 2.5. Areas requiring corrective action are identified
3. Report and follow up audit outcomes	3.1. Situations presenting an imminent and serious risk to the program objectives are identified and reported immediately in accordance with reporting requirements 3.2. Audit reports are prepared to address audit scope requirements 3.3. The results of the audit are communicated according to audit purpose and requirements 3.4. A corrective action plan is developed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify personal roles and responsibilities for participating in the audit process
- identify audit purpose, scope, steps and timelines
- identify and locate information required to conduct the audit
- review workplace documentation to confirm that required information is available
- prepare tools as required to collect information, such as checklists and interview schedules
- identify any changes that have occurred in the workplace since initiating the program or since the last program audit that could affect program outcomes
- apply appropriate questioning, observation and related communication skills to support information collection
- review records, conduct interviews, observe workplace practice and collect other relevant information as required to assess compliance with program requirements
- take immediate action to report non-conformities that present an imminent and

REQUIRED SKILLS AND KNOWLEDGE

- serious risk to the program objectives within level of responsibility
- identify, investigate and record evidence of non-conformance and judge significance
- assess the adequacy of the program by analysing the information collected against the program objectives
- form conclusions on audit outcomes based on an objective assessment of evidence collected
- report the findings of the audit in appropriate format
- communicate audit outcomes within level of responsibility using techniques and presentation styles appropriate to the audience
- where findings indicate either a failure to comply with the program or inadequacy of the program, participate in investigation of causes of failure and identification of corrective action options
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- the purpose and intent of the program being audited
- personal roles and responsibilities in the audit process and related responsibilities of other members of the audit team
- the purpose and stages involved in the audit process
- workplace information and related information management systems
- techniques for collecting information, including options, relevance and strengths and weaknesses of each method to ensure data is adequate and representative
- data analysis methods relevant to the audit process
- communication skills and techniques appropriate to the workplace
- technical knowledge relevant to the program being audited in order to verify compliance and assess adequacy of existing control measures, including relevant industry standards
- purpose and responsibilities for maintaining records

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment

EVIDENCE GUIDE	
Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify the requirements and procedures for participating in the audit • identify the purpose and scope of the audit • collect, assess and provide information as required by the audit process • identify and act on inconsistencies or issues which may affect audit processes or outcomes • comply with audit requirements • follow up on audit outcomes.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • workplace program documentation • audit procedures and standards as applied in the workplace • advice on related legislation, industry standards and codes of practice • information systems and data collection technology • reporting formats/requirements • workplace/personnel as required to collect data/observe compliance.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. In addition, the following optional unit may be relevant: • BSBRES401A Analyse and present research information.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Audits	Audits may be conducted against workplace programs and/or legislative requirements. Audits may be undertaken for advisory or regulatory purposes and may be led by internal or external auditors
Information collection methods	Information collection methods include: • interviews • observation • review of workplace records • accessing relevant technical information
Corrective action plans	A corrective action plan identifies non-conformance, corrective actions, date by which action must be taken and any other follow up requirements

Unit Sector(s)

Unit sector	People management/planning/logistics

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFPPL4005A Establish process capability

Modification History

November 2011: inclusion of correct prerequisite.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to study process data to determine process capability using statistical process control techniques.

Application of the Unit

Application of the unit	This unit applies to people responsible for establishing control charts and related sampling plans.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFOP2015A	Apply principles of statistical process control* <i>FDFOP2061A Use numerical applications in the workplace</i>
	FDFTEC4007A	Describe and analyse data using mathematical principles

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to conduct a capability study	1.1. The scope and purpose of the process is identified 1.2. A representative data sample is determined 1.3. Data collection techniques are selected 1.4. Data is collected to meet sampling requirements
2. Analyse data to determine process capability	2.1. Appropriate statistical analysis techniques are selected and applied 2.2. Process stability and extent of variation are identified 2.3. The target mean for the process is identified 2.4. Process control parameters are calculated 2.5. Related data sampling requirements are specified

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
Ability to: establish process scope, boundaries and related information on process purpose,

REQUIRED SKILLS AND KNOWLEDGE

- such as documentation, including product or process specifications where available
- apply sampling techniques to determine nature and extent of data collection to provide a reliable indication of process performance
 - select and apply data collection methods (where data collection is automated, this may involve use of software and where data collection is to be carried out by operators, it involves communicating requirements and designing appropriate formats for recording data)
 - confirm that data collected is complete and complies with sampling requirements
 - identify characteristics of a normal distribution
 - apply appropriate statistical techniques, including standard deviation to analyse data, and techniques to distinguish common and special causes of variation
 - establish process capability, including establishing upper and lower limits and instructions for identifying and responding to trends
 - develop a related data sampling plan, including advice on sampling regimes following corrective action
 - use communication skills to interpret and complete work information to support operations of work team or area
 - demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge***Knowledge of:***

- data collection requirements and techniques for collection of actual (quantitative) and variable data
- techniques to determine and validate a sampling plan capable of providing reliable information representative of the total population
- appropriate formats for presenting sampling plan requirements and related communication systems
- workplace conventions/formats for presenting and monitoring process capability information, such as control chart including a target mean, upper and lower limits and advice on how to interpret and confirm trends, and upper and lower warning limits where required
- process knowledge to identify possible causes of special variation
- the difference between a stable process and a capable process and action required to improve process performance in each case

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the

EVIDENCE GUIDE	
performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • determine scope of and purpose of study • establish data collection parameters • select data collection technique • collect and analyse data • determine process capability • complete workplace records as required • apply safe work practices and identify occupational health and safety (OHS) hazards and controls.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • workplace processes and procedures • workplace documentation, including process specifications/purpose, sampling plan and control chart formats, and related data collection methods, such as log sheets • data collection and analysis software and systems as appropriate • communication systems.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Data collection	Data collection is specified and may be collected by others
Data analysis	Data analysis typically involves the use of statistical analysis software

Unit Sector(s)

Unit sector	People management/planning/logistics

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFSUG218A Operate a boiler - basic

Modification History

New Unit based on *SUGPOBB2A Operate a boiler - basic*.

Unit Descriptor

This unit describes the outcomes required for continuous and short term operation of a basic boiler and for start-up and shut down after a prolonged break. This unit is based on the boiler competency standards from the Worksafe Australia Standards for Users and Operators of Industrial Equipment NOHSC 1006 (2001). It should be selected where boiler operation is a certificated occupation. Boiler operators holding a ticket in Basic Boiler Operation from the relevant state regulatory authority will be granted equivalence in this unit *FDFSUG231A Operate a boiler basic* for the purpose of issuing a qualification.

Application of the Unit

This unit has application in the sugar milling industry.

Licensing/Regulatory Information

General workplace legislative and regulatory requirements apply to this unit; however there are no specific licensing or certification requirements at the time of publication.

Pre-Requisites

There are no pre-requisite units for this competency standard.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare the boiler for operation	1.1 Health and safety hazards / maintenance requirements are identified and reported to appropriate personnel according to workplace reporting procedures 1.2 The boiler is purged according to workplace procedure 1.3 Services are confirmed and available 1.4 Pre-operational checks are conducted to confirm operational status of boiler and related equipment
2 Start and monitor boiler operation	2.1 The boiler is started and brought on line safely according to workplace procedures and manufacturer's specifications 2.2 Plant is operated within limits of manufacturer's specifications to meet workplace requirements 2.3 Equipment is monitored to confirm operating condition 2.4 Water quality is tested and adjusted as required 2.5 Sluice water is circulated to remove ash from boiler according to duty requirements 2.6 The workplace meets housekeeping standards
3 Analyse and respond to abnormal performance	3.1 Operating data and plant operating conditions are analysed to identify causes of abnormal performance 3.2 Corrective action is taken in accordance with workplace procedures in response to Hazards, out-of-specification test results and/or plant performance 3.3 Emergency procedures are implemented as required according to workplace procedures and manufacturer's recommendations
4 Handover boiler operations	4.1 Workplace records are maintained in accordance with statutory requirements and workplace procedures 4.2 Handover is carried out according to workplace procedure 4.3 Boiler operators are aware of boiler status and related equipment at completion of handover
5 Carry out an operational shutdown	5.1 The boiler is shut down according to workplace procedures and manufacturer's recommendations 5.2 Maintenance requirements are identified and reported according to workplace reporting procedure
6 Shutdown the boiler and prepare for an internal inspection	6.1 The boiler is shut down according to workplace procedures and manufacturer's recommendations 6.2 The boiler is cleaned internally and externally according to workplace procedures and manufacturer's recommendations 6.3 Valves and fittings are removed in preparation for maintenance
7 Store boiler in	7.1 The boiler is stored in the appropriate storage mode according to

ELEMENT	PERFORMANCE CRITERIA
shutdown mode	workplace procedures and manufacturer's recommendations
8 Record information	8.1 Workplace information is recorded according to workplace recording requirements

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- access workplace information on combustion and operating requirements
- select, fit and use personal protective clothing and/or equipment
- identify and report hazards and potential hazards in the work area
- confirm status of boiler and related equipment including the fuel supply system, ash removal and services
- demonstrate purge procedure
- conduct pre-start checks including checking:
 - feed water supply and system
 - fuel supply system
 - fans and dampers
 - inspection doors
 - boiler valves - operation and position
 - combustion air supply system
 - boiler water level
- liaise with other work areas to advise of boiler status
- demonstrate set-up and start-up procedures in both manual and automatic modes
- monitor boiler operation including monitoring:
 - steam reticulation line pressure
 - boiler steam pressure
 - steam supply/usage
 - condensate tank level
 - bagasse levels
 - feedwater levels and pressure
 - fuel levels
 - boiler load
 - water quality
 - furnace pressure

- ash pit level and removal system
- balance draft system
- superheater temperature
- drum levels
- equipment condition
- conduct water quality test
- take corrective action in response to out-of-specification results
- report and/or record corrective action as required
- demonstrate shift handover procedure and confirm that replacement operators are aware of all relevant issues prior to completing handover
- demonstrate procedure to take boiler off line
- demonstrate procedure to shut-down and clean the boiler
- demonstrate removal of valves and fittings to prepare the boiler for inspection
- demonstrate procedure to store boiler
- demonstrate emergency procedures and related re-start including the use of emergency fuel supply
- maintain workplace records
- maintain work area to meet housekeeping standards

Required knowledge includes:**Knowledge of:**

- relevant state OHS legislation, standards and codes of practice relating to work responsibilities
- safe work procedures including awareness of health and safety hazards related to boiler operation and associated control measures
- purpose and limitations of protective clothing and equipment
- hierarchy of hazard control measures
- duty of care of the boiler operator
- purpose and basic principles of combustion and boiler operation including principles of heat transfer and properties of steam
- boiler system layout and steam cycle
- the purpose of purging a boiler
- the effect of fuel quality on boiler operation
- impact of ash removal on efficient boiler operation and impact of sluice water flow
- relationship to other processes including an understanding of the impact of sudden load changes on boiler pressure and plant operation
- purpose and limitations of protective clothing and equipment
- methods used to render equipment safe to inspect, maintain and/or clean including lock-out, tag-out and isolation procedures
- water quality test procedures
- typical causes of water/condensate contamination and corrective action required
- equipment purpose and basic operating principles including high pressure feed pumps, fuel

supply system and dual fuel systems as required by boiler type

- operating requirements and parameters
- procedures for responding to emergency situations including safe shutdown procedure
- handover and long term shut down and storage procedures
- cleaning procedures and grate dumping
- environmental issues and controls including an understanding of sluice water usage
- requirements to liaise/advise related work areas
- housekeeping standards for the work area
- reporting and recording systems including both statutory and workplace requirements

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • confirm status of boiler and related equipment including the fuel supply system, ash removal and services • demonstrate purge procedure • conduct pre-start checks • liaise with other work areas to advise of boiler status • demonstrate set up and start up procedures in both manual and automatic modes • conduct water quality test • take corrective action in response to out-of-specification results • report and/or record corrective action • demonstrate emergency procedures and related re-start.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • Boiler and related equipment. This includes fuel supply, grate cleaning and ash removal systems • Relevant codes and standards • Operating procedures and related advice on equipment operation

	• Personal protective clothing and equipment • Communication systems and equipment • Housekeeping standards and procedures • Workplace information recording systems, requirements and procedures.
Method of assessment	Other units of competency relevant to the work role should be assessed in conjunction with this unit. This may include: • FDFOP2030A Operate a process control interface
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures	Work is carried out in accordance with company policies and procedures, licensing requirements, manufacturer's recommendations, legislative requirements, codes of practice and industrial awards and agreements.
Codes of Practice	Codes of practice include the Sugar Milling Operations Industry Code of Practice.
Workplace information	Workplace information can include • Standard Operating Procedures (SOPs) • manufacturer's specifications.
Boilers [basic]	Boiler (basic) and related equipment may be • fully or partly attended, and include • single fixed combustion air supply • non-modulating single heat source • fixed firing rate. Operation and monitoring of equipment and processes typically requires the use of control panels and systems.

Hazards	Hazards typically include: • working around hot surfaces • manual handling • steam, hot gasses and fuel leaks.
Services	Services can include fuel supply of bagasse, coal, gas, oil or other fuel types, steam, mill and instrumentation air, cooling water, general mill water supply and cooling water.
Equipment status	Confirming equipment status involves: • conducting relevant pre-start checks • confirming that cleaning standards are met • all safety guards and manholes are in place • equipment is operational.
Internal cleaning	Internal cleaning is carried out in accordance with statutory requirements regarding confined space entry and does not typically include chemical cleaning.
Teamwork	Work may require the ability to work within a team environment.
Information systems	Information systems may be print or screen based.

Unit Sector(s)

Sugar Milling.

FDFSUG222A Operate a waste water treatment system

Modification History

New Unit based on *SUGPWWT2A Operate a waste water treatment system*.

Unit Descriptor

This unit describes the outcomes required to operate waste water treatment systems to comply with workplace requirements, trade waste agreements and site environmental authority.

Application of the Unit

This unit has application in the sugar milling industry.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

There are no pre-requisite units for this competency standard.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare the waste water treatment	1.1 Chemicals and test equipment are available and ready for use

ELEMENT	PERFORMANCE CRITERIA
process for operation	1.2 Services are confirmed as available and ready for operation 1.3 Pre-operational checks are conducted 1.4 Instrumentation and test equipment is calibrated to manufacturer's specifications to meet workplace requirements 1.5 Health and safety hazards/maintenance requirements are identified and reported to appropriate personnel according to workplace reporting procedures
2 Operate and monitor the waste water treatment process	2.1 The waste water system is started up according to company procedures 2.2 Plant is operated within limits of manufacturer's specifications to meet workplace requirements 2.3 Equipment is monitored to confirm operating condition 2.4 Waste water quality is monitored, tested and adjusted as required to meet water standards as defined by site licence 2.5 First flush systems are operated during rainfall events 2.6 The workplace meets housekeeping standards
3 Analyse and respond to abnormal performance	3.1 Water condition and plant operating conditions are analysed to identify causes of abnormal performance 3.2 Corrective action is taken in accordance with workplace procedures in response to hazards, out-of-specification test results and/or plant performance 3.3 Emergency procedures are implemented as required according to workplace procedures and manufacturer's recommendations
4 Handover waste water treatment system	4.1 Workplace records are maintained in accordance with statutory requirements and workplace procedures 4.2 Handover is carried out according to workplace procedure 4.3 Waste water treatment operators are aware of system status and related equipment at completion of handover
5 Shutdown the waste water treatment system	5.1 The waste water treatment system is shut down according to workplace procedures 5.2 The waste water treatment system is prepared for storage in shut down mode 5.3 Maintenance requirements are identified and reported according to workplace reporting procedure

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- access workplace information to identify waste treatment requirements
- select, fit and use personal protective clothing and/or equipment
- confirm services are available and equipment is clean and ready for operation
- handle chemicals safely including follow correct preparation, handling and storage procedures and use of appropriate protective clothing and equipment
- conduct pre-start checks
- liaise with other work areas as required
- demonstrate wastewater system operating procedures in both manual and automatic modes
- demonstrate first flush system operating procedures in both manual and automatic modes
- monitor waste water system operation including monitoring:
 - chemical addition rates and residuals
 - temperatures
 - flow rates
 - equipment condition including calibration of instruments
 - tests as required
 - dissolved oxygen levels
 - pH levels
- conduct water quality tests
- take corrective action in response to out-of-specification results or non-compliance
- monitor supply and quality of waste water to and from the process
- report and/or record corrective action as required
- demonstrate emergency procedures to control chemical spills or other major incidents relevant to the workplace
- demonstrate shift handover procedure
- demonstrate an operational shut down procedure
- maintain workplace records to meet the requirements of the workplace and site environmental authority
- maintain work area to meet housekeeping standards

Required knowledge includes:

Knowledge of:

- relevant state OHS legislation, environmental acts and policies, standards and codes of practice relating to work responsibilities including awareness of standards set out in site license arrangements
- safe work procedures including awareness of health and safety hazards related to waste water system operation and associated control measures
- hierarchy of hazard control measures
- purpose and limitations of protective clothing and equipment
- methods used to render equipment safe to inspect, maintain and/or clean including lock-out,

tag-out and isolation procedures

- water cycles for trade waste, storm water and sewerage including sources and flow patterns
- purpose and standards required by environmental agreements and responsibilities
- company policy relating to environmental performance
- consequences of non-conformance
- waste characteristics and treatment methods
- sampling and test procedures as appropriate
- purpose of chemicals used
- purpose of first flush systems and their relationship with the wastewater treatment system
- operating requirements and parameters
- water quality sampling and test procedures including the purpose of test and safe use, care and storage of relevant test equipment, interpretation and recording of results
- typical causes of non-conforming water quality and corrective action required
- equipment purpose and basic operating principles of waste water treatment equipment and methods
- requirements of both operational and long term shut down conditions to ensure the equipment is left in a safe state for the period of the shutdown and to minimise any delays in future start up
- housekeeping standards for the work area
- reporting and recording systems including both statutory and workplace requirements

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- handle chemicals safely
- demonstrate wastewater system operating procedures
- demonstrate first flush system operating procedures
- conduct water quality tests
- take corrective action in response to out-of-specification results or non-compliance
- monitor supply and quality of waste water
- report and/or record corrective action
- demonstrate emergency procedures
- demonstrate shift handover procedure

	demonstrate an operational shut down procedure.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: - Waste water treatment systems and related chemicals - Test equipment - Relevant advice on environmental agreements - Operating procedures and related advice on equipment operation - Personal protective clothing and equipment - Communication systems and equipment - Housekeeping standards and procedures - Workplace information recording systems, requirements and procedures.
Method of assessment	Other units of competency relevant to the work role should be assessed in conjunction with this unit.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures	Work is carried out in accordance with company policies and procedures, manufacturer's recommendations, legislative requirements, site licenses and trade waste service agreements and industrial awards and agreements. Legislation refers to environmental acts and regulations.
Workplace information	Workplace information can include: - Standard Operating Procedures (SOPs) - manufacturer's specifications
Equipment	Equipment may include

	• screens • pH correction • oil/grease skimmers • settling and treatment ponds • aeration units • lagoons • first flush systems and wetlands • pumps and valves.
Equipment status	Confirming equipment status involves • conducting relevant pre-start checks • confirming that housekeeping standards are met • all safety guards are in place • equipment is operational.
Hazards	Hazards typically include handling chemicals, manual handling and flammable gases.
Equipment operation and monitoring	Operation and monitoring of equipment and processes typically requires the use of control panels and systems.
Tests	Typical tests may include • pH • solids • colour/turbidity • flow rate • settling rate • settled volume • DO • BOD/COD levels.
Teamwork	Work may require the ability to work within a team environment.
Information systems	Information systems may be print or screen based.

Unit Sector(s)

Sugar Milling.

FDFSUG308A Analyse and convey workplace information

Modification History

New Unit based on *SUGAECWE3A Analyse and convey workplace information*.

Unit Descriptor

This unit describes the outcomes required to analyse and interpret information. It also involves preparing and presenting information to others. The presentation component of this unit supports the communication requirements for delivering workplace training.

Application of the Unit

This unit has application in the sugar milling industry.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

There are no pre-requisite units for this competency standard.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Manage information	1.1 Information requirements are identified 1.2 Information systems are used to store, retrieve and update information 1.3 Consultative processes are used to collect and convey information 1.4 Methods used to collect, store, retrieve and convey information are reviewed and improved
2 Analyse information	2.1 Information is stored and collected in a format suitable for analysis and interpretation 2.2 Information collection is timely and relevant to the needs of individuals and teams 2.3 Information is collected, analysed and interpreted
3 Present information	3.1 Information is effectively communicated to individuals and groups 3.2 Communication takes into account social and cultural differences

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Ability to:

- facilitate consultative processes
- use information storage and retrieval systems to access store and update information
- select appropriate methods to communicate with different audiences in the workplace
- collect information in appropriate format
- analyse and interpret information
- select appropriate presentation methods to convey information for different purposes
- structure information in a logical sequence
- recommend improvements to information management practices

Required knowledge include:

Knowledge of:

- information recording, storage and retrieval systems
- consultative and group processes

- data collection and analysis techniques as required
- meeting procedures
- presentation techniques

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • exchange work-related information • ask questions to inform work practice • apply work information to work practice.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • Opportunities to interact with others using typical workplace communication processes • Typical group forums which can include work groups and committees • Typical workplace information • Standard forms and equipment (as required) for recording workplace information • Information storage and retrieval systems
Method of assessment	Other units of competency relevant to the work role should be assessed in conjunction with this unit.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work

environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company policies and procedures, manufacturer's recommendations, legislative requirements, codes of practice and industrial awards and agreements.
Codes of Practice	Codes of practice include the Sugar Milling Operations Industry Code of Practice.
Communication content	Subjects for communication may be of a general, procedural or technical nature. They can also include providing feedback to individuals on work performance and discussing issues which may be of a sensitive and/or confidential nature.
Communication language	Every day workplace language is used. This may include technical terms.
Communication systems	Communication systems reflect the culture of the workplace and the workforce
Communication processes	Interactive communication processes include active listening, constructive feedback, negotiation and conflict resolution.
Workplace information	Information may be presented verbally, in written and screen-based forms. It can also include technical drawings, diagrams and graphs.
Data analysis	Data analysis can include techniques appropriate to work responsibilities such as statistical analysis, troubleshooting and problem solving and planning
Teamwork	Work may require the ability to work within a team environment.
Group processes	Group processes may include formal meeting procedures and informal group processes.

Unit Sector(s)

Sugar Milling

FDFTEC3001A Participate in a HACCP team

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to participate in the development and/or review of a HACCP-based food safety program under direction.

Application of the Unit

Application of the unit	This unit is appropriate where the operator requires a detailed understanding of the steps and techniques used to develop and review a HACCP-based food safety program. This unit can be aligned at either AQF 3 or 4. When aligned at AQF 3 the person would typically participate in the development of the food safety program as part of a group. The scope of contribution would typically be limited to their immediate work area. When this unit is applied at AQF 4 the person may take a lead role in facilitating the development of the food safety program and would apply an understanding of food safety across more diverse operations or work areas. This unit is based on and achieves part of the guideline food safety unit GFSDFSPA Develop food safety programs.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFFS2001A	Implement the food safety program and procedures

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare to develop and/or review a food safety program	1.1.Roles and responsibilities for participating in, developing or reviewing a food safety program are identified 1.2.The scope of the food safety program is identified
2. Identify and/or review food safety hazards	2.1.Processes to be covered by the food safety program are identified and steps within each process are described 2.2.Food safety hazards that are reasonably expected to occur are identified for each process 2.3.Handling methods, processing techniques and existing support programs used in the workplace are identified
3. Establish and/or	3.1.Acceptable methods of control are established for

ELEMENT	PERFORMANCE CRITERIA
review methods to monitor and control food safety hazards	each food safety hazard that is reasonably expected to occur 3.2. Control methods are validated 3.3. Procedures for taking preventative action are established 3.4. Appropriate methods for monitoring that processes remain within control are established 3.5. Required corrective action to respond to situations where hazards are not effectively controlled is established 3.6. Work is conducted in accordance with workplace environmental guidelines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify personal roles and responsibilities for participating in the development or review of a food safety program
- identify processes and steps to be covered
- identify hazards that are reasonably expected to occur and establish appropriate methods of control, such as participating in validating existing control methods and where there is no adequate control method in place, establishing an appropriate method
- establish or review procedures for implementing preventative action, such as revision of materials, processes and/or food handling procedures, and where required, the revision of workplace practices and documentation, such as specifications, operating procedures and approved supplier programs
- describe the appropriate monitoring requirements for each food safety hazard, including the method or procedure to be followed, the frequency and timing, the person responsible, and the information to be recorded (procedures to be followed would typically be specified in the form of a standard operating procedure or work instruction)
- describe corrective action requirements in the event that acceptable limits or

REQUIRED SKILLS AND KNOWLEDGE

- requirements of support programs are not met
- develop or review documentation relating to the design and maintenance of the food safety program, such as flow diagrams, hazard analysis charts and tables, support program requirements, data analysis reports, corrective action reports and verification reports
- develop or review documentation to communicate food safety responsibilities, such as standard operating procedures (SOPs), processing parameters and recording devices (e.g. log sheets)
- communicate food safety responsibilities within level of responsibility using techniques and presentation styles appropriate to the audience
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- the purpose and intent of food safety legislation
- purpose and responsibilities for maintaining records as required by legislation and workplace procedures
- roles and responsibilities for development and maintenance of the food safety program, including roles of internal and external auditors and of authorised officers
- techniques for applying HACCP-based principles, including techniques for identifying hazards, assessing the likelihood of occurrence, determining acceptable methods of control, monitoring and recording requirements for each control point, identifying corrective action if controls are not met, and developing system review procedures
- techniques used to map operations and analyse food safety requirements, such as preparation of flow charts, hazard analysis charts and tables, and data analysis reports
- raw materials, ingredient and finished product composition and characteristics, and related handling and storage requirements
- food processing methods used in the workplace or work area and their effect on food safety
- sources of technical expertise on food safety requirements
- the role of consultation in the development, implementation and ongoing maintenance of the food safety program
- documentation and recording requirements to support communication and monitoring of the food safety program, including procedures for maintaining and updating relevant documents, such as operating procedures
- main types of food safety hazards/contamination likely to occur given the type of

REQUIRED SKILLS AND KNOWLEDGE

- product and processing methods used
- conditions required for bacterial food poisoning to occur, such as water activity, pH, composition, time and temperature as relevant to food handled
- acceptable control methods for the hazards identified and required corrective action when control requirements are not met
- typical support programs, such as cleaning schedules, pest control, stock rotation, product traceability and personal hygiene, and how they can be used as part of a food safety program
- acceptable control methods for the hazards identified and required corrective action when control requirements are not met
- validation and verification processes and techniques and responsibilities

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify components and parameters of a food safety program
- identify food safety hazards in production processes
- establish and validate control standards and methods for each hazard
- establish procedures for unpredicted hazards
- communicate and document hazards and control procedures
- complete workplace records
- apply safe work practices and identify occupational health and safety (OHS) hazards and controls
- apply food safety procedures.

Context of and specific resources for

Assessment must occur in a real or simulated workplace

EVIDENCE GUIDE	
assessment	where the assessee has access to: • workplace food safety program documentation • advice on quality and food safety legislation • procedures for developing or modifying specifications and other advice on food safety requirements • procedures for developing or modifying documentation, such as work instructions and procedures, log sheets and other recording requirements • review/audit arrangements • consultative mechanisms • communication systems • training system • reporting/recording system.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Food safety programs	A food safety program is a written document that specifies how a business will control all food safety hazards that are reasonably expected to occur in the food business. The food safety program must provide for the systematic

RANGE STATEMENT	
	monitoring of the controls as well as appropriate corrective action if a hazard is found not to be under control. Records must be kept to demonstrate action in relation to, or in compliance with, the food safety program. A food safety program may be developed as a stand-alone program or may be integrated with the quality program in a workplace
Methods used to control hazards	Methods used to control hazards include: • both support programs and specific hazard control limits or requirements Typical examples of support programs include: • product recall • cleaning schedules • pest control programs • personal hygiene practices • calibration procedures and related operating procedures
Food safety hazards	Food safety hazards include: • microbiological • chemical • physical hazards
Validation	Validation refers to: • the use of objective evidence in order to prove that materials, processes, procedures or equipment used are capable of delivering the intended result
Verification	Verification refers to: • reviewing all aspects of the food safety program and related records to determine compliance with and adequacy of the food safety program At a minimum, food safety programs must be verified annually
Scope of the HACCP based plans	The scope of the HACCP-based plan depends on workplace requirements and may extend outside the direct area of responsibility of the team participants

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC3002A Implement the pest prevention program

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to implement an existing pest management program.

Application of the Unit

Application of the unit	This unit has application in a food production environment. It typically targets the worker responsible for inspecting food products and implementing control procedures. In some states and territories, activities including purchasing and application of some pesticides are covered by licensing arrangements. Where this applies, the appropriate licence is a prerequisite for undertaking this unit. When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Food Standards Code and reference to food safety is replaced by GMP.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Monitor the implementation of pest prevention measures	1.1. Inspections are conducted to monitor the effectiveness of pest prevention measures 1.2. Signs of pest infestation are identified, analysed and reported 1.3. Hygiene standards are maintained to meet company requirements
2. Implement pest elimination procedures	2.1. Control measures suited to infestation are selected 2.2. Procedures for the elimination of pests are implemented 2.3. Records are maintained 2.4. Waste is collected, treated and disposed of according to company procedures 2.5. Work is conducted in accordance with workplace environmental guidelines

ELEMENT	PERFORMANCE CRITERIA
3. Review pest control programs	3.1. Pest infestation is monitored to confirm effectiveness of treatment method 3.2. The treatment program is modified within level of responsibility 3.3. Changes to the treatment program are reported to the appropriate personnel

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- recognise indicators of pest invasion
- select appropriate control method according to the control program in place
- select, fit and use personal protective clothing and/or equipment
- follow pest elimination procedures, such as preparing pesticides for use, applying pesticides according to company procedures and licensing arrangements, setting up and operating equipment, such as fumigation and other pesticide application equipment, and preparing and placing baits as required
- follow procedures to measure and monitor pest populations, such as sampling, testing and recording data
- review effectiveness of control methods and amend or recommend changes to program as required
- safely dispose of pesticides, residues, empty containers and pests
- monitor the implementation of housekeeping and cleaning standards
- conduct tests according to enterprise procedures, such as using instrumentation to measure the presence of airborne pesticides
- carry out basic maintenance required to support pest prevention measures according to enterprise procedures
- liaise with external contractors according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

REQUIRED SKILLS AND KNOWLEDGE

Knowledge of:

- basic principles of integrated pest management (IPM), including identification of pest hazards, establishment of pest elimination methods and monitoring the effectiveness of these measures
- methods used to prevent pest invasion suited to workplace and typical pest invasion, including appropriate work area and storage design features to minimise the possibility of pest infestation through building access points, packaging materials/requirements to protect product from pests and other physical and mechanical control measures
- housekeeping and cleaning standards to minimise conditions which attract pests
- food safety issues relating to the use of pesticides in a food handling area
- characteristics and behaviour of each type of pest at each life cycle stage
- conditions required by pests for survival
- methods and procedures used to minimise pest resistance to elimination methods
- range of pesticides used in the workplace
- legislation, codes of practice and procedures relating to the purchase, transport, storage, use and disposal of pesticides
- safe procedures for handling, using and storing pesticides and dangerous goods, identifying identification of information provided on labels, and where required, handling of gas cylinders
- purpose, application and limitations of protective clothing and equipment
- test methods where relevant
- basic maintenance procedures where relevant
- contractor service arrangements where relevant

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate

- Evidence of ability to:
- conduct pest inspections

EVIDENCE GUIDE	
competency in this unit	• identify pest infestations and select suitable control measures • implement pest control measures in accordance with procedure • monitor effectiveness of controls • assess control procedures and contribute to improvement of pest control • complete workplace records as required • apply safe work practices and identify OHS hazards and controls • apply food safety procedures
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • work procedures, including advice on safe work practices, food safety and environmental requirements • pesticide labels • MSDS and personal protective clothing and equipment • pest management program and procedures • pest management compounds and equipment • housekeeping procedures and cleaning schedules in the work area, such as storage, production and/or packaging areas • documentation and record keeping system.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2011A Conduct routine maintenance • FDFOP2013A Apply sampling procedures • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Work is carried out in accordance with company procedures, regulatory and licensing requirements, legislative requirements and industrial awards and agreements
Workplace information	Workplace information may include: • pest management program • pesticide labels • work instructions • standard operating procedures (SOPs) • specifications • materials safety data sheets (MSDS) • manufacturers' advice • standard forms and reports
Hazardous substances	Work may involve: • exposure to chemicals and other hazardous substances and may require working in accordance with a permit to work
Pests	Pests include: • vertebrates, such as birds, rats and mice • invertebrates, such as insects
Pest control methods	Pest control methods may include: • fumigation • application of insecticides, dusts, gas and/or baits (using registered controlled and generally available substances) Where use of pesticides include work conditions covered by National Occupational Health and Safety Commission and/or state and territory health and safety authorities, the assessment criteria and methods prescribed by these

RANGE STATEMENT	
	authorities must also be met
Selection of control measures	Selection of control measures occurs in the context of an existing program
Application equipment	Application equipment may include: • automated reticulation systems • sprayers • misters and dosing equipment
Tests	Tests may include: • testing the level of fumigant in the atmosphere and pressure testing
Records	Records are maintained to meet legal and company requirements

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC3003A Apply raw materials, ingredient and process knowledge to production problems

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers skills and knowledge required to apply knowledge of ingredients and processes to troubleshoot typical problems that occur in preparing, processing and/or packaging product.

Application of the Unit

Application of the unit	This unit applies where problem solving occurs over one or more processes and requires an understanding of the characteristics of raw materials and ingredients and processing methods used. It typically applies to the production operator where responsibility for solving problems relating to non-conforming raw materials, ingredients and processes.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify and respond to non-conforming ingredients/raw materials	1.1.Non-conformance in raw materials/ingredients is identified and reported according to workplace reporting requirements 1.2.Causes of non-conformance are investigated and reported according to workplace reporting requirements 1.3.Corrective action is determined and implemented within level of responsibility and workplace procedures 1.4.Action is taken to prevent recurrence of non-conformance 1.5.Action is reported according to workplace reporting requirements
2. Identify and respond to non-conforming product and processes	2.1.Processing parameters, stages and changes which occur during processing are monitored 2.2.Non-conformance in processing, handling and/or storage is identified and corrective action taken according to workplace requirements 2.3.Causes of non-conformance relating to processing, handling and/or storage are investigated and reported according to workplace reporting requirements 2.4.Corrective action is determined and implemented within level of responsibility and workplace procedures

ELEMENT	PERFORMANCE CRITERIA
	2.5. Action is taken to prevent recurrence of non-conformance 2.6. Action is reported according to workplace reporting requirements 2.7. Work is conducted in accordance with workplace environmental guidelines

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify requirements of ingredient/raw material characteristics within level of responsibility
- follow procedures to identify, remove/isolate and report non-conforming ingredients/materials and/or product according to workplace reporting requirements
- determine likely causes of non-conformance of ingredients/raw materials
- recognise indicators of unacceptable or non-conforming processing, handling and/or storage outcomes
- act promptly to identify, remove/isolate and report non-conforming product and/or processes
- access and apply workplace information relating to process troubleshooting
- investigate non-conformance to determine likely causes and report findings to appropriate personnel
- identify action required to correct non-conformance and implement within level of responsibility
- identify action required to prevent or minimise and control recurrence of non-conformance and implement within level of responsibility
- complete workplace records, including reporting non-conformance and documenting corrective actions according to workplace recording procedures
- conduct tests to confirm raw material/ingredient and/or final product quality characteristics according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

REQUIRED SKILLS AND KNOWLEDGE

Required knowledge

Knowledge of:

- basic composition and function of each main raw material/ingredient used, such as awareness of ingredient grades or types
- common causes of contamination/unacceptable quality of raw materials/ingredients
- methods used to confirm quality standard, such as accessing information (e.g. certificates of analysis and/or laboratory clearance information)
- the effect of variation in raw materials/ingredients on processing stages and final product outcome, including factors likely to cause variation, and scope to adjust or correct for variation at each processing stage
- appropriate handling and storage requirements for raw materials/ingredients and final product, and the effect of failing to meet required storage conditions
- the changes and reactions that occur through processing stages, including the signs and symptoms of poor/unacceptable processing or equipment operation
- factors that affect the shelf-life of product
- the inter-relationships between processing stages and the effect of variation in processing parameters on process outcome and on final product, including factors likely to cause variation, and scope to adjust or correct for variation at subsequent process stages
- procedures for identifying and isolating non-conforming product
- troubleshooting information and techniques
- procedures and related documentation required to amend or introduce a new method or procedure, such as short term procedures for amending or updating specifications and processing parameters
- reporting requirements and responsibilities
- test methods to confirm raw material/ingredient and/or final product quality characteristics where relevant

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.

EVIDENCE GUIDE	
	Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • describe required quality characteristics for raw materials and ingredients • describe required processes to achieve production specifications • identify common non-conforming materials and ingredients and causes • identify common non-conforming processes and causes • determine and undertake corrective action for non-conformances • complete workplace documentation and report non-conformances • apply food safety procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • ingredient/raw materials specifications and related advice, such as certificates of analysis • ingredients/raw materials and final product and related processing equipment and stores areas • troubleshooting information relevant to workplace processes • sampling and test equipment and procedures as required • system for managing and updating workplace documents, such as Standard Operating Procedures (SOPs) and log sheets/processing parameters • reporting and recording system and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2013A Apply sampling procedures • FDFPPL3002A Report on workplace performance • MSL973001A Perform basic tests • PMBQUAL390A Solve problems using quality tools.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of

EVIDENCE GUIDE

	circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures

Work is carried out according to company procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements.

Legislative requirements

Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes:

- the Food Standards Code, including labelling, weights and measures legislation
- legislation covering food safety, environmental management, occupational health and safety (OHS), anti-discrimination and equal opportunity

When applied to the pharmaceutical industry, relevant Good Manufacturing Practice (GMP) codes apply in place of the Food Standards Code and reference to food safety is replaced by GMP

Ingredients/raw materials

Ingredients/raw materials are those used to manufacture product

Typical processing and related techniques

Typical processing and related techniques include but are not limited to:

- raw materials/ingredient dispensing
- preparation
- mixing and blending
- conditioning

RANGE STATEMENT	
	• primary and further processing • wrapping • packing and storage
Typical process parameters	Typical process parameters include but are not limited to: • temperature • time • pressure • flow rate
Typical reactions	Typical reactions depend on processing method. Examples include but are not limited to: • gelatinisation and hydration
Problem minimisation	Where recurrence of a problem cannot be prevented, procedures should be established to minimise the likelihood of recurrence and to identify any further incidents

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4001A Determine handling processes for perishable food items

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the knowledge required to determine process and equipment requirements for the handling and storage of perishable food items.

Application of the Unit

Application of the unit	This unit covers management of handling, packing and storage processes used for perishable food items, such as fresh fruit and vegetables. It includes analysing current best practice processes and equipment and determining workplace practice. The unit includes an understanding of the principles of modified atmosphere packing processes. This unit is not designed to meet the competency requirements of the person responsible for determining packaging specifications, nor does it cover food packaging and labelling legislation. Where this is a requirement, refer to FDFTEC4006A Apply an understanding of legal requirements in food production.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify packing, handling and storage requirements for perishable food product	1.1. Requirements and performance measures for packing, handling and storage of perishable food product are identified 1.2. Current best practice for packing, handling and storage of perishable food product are identified and workplace practices assessed for performance 1.3. Features and operational processes of equipment used to handle, pack and store perishable food product are identified 1.4. Customer and legal requirements of packing, handling and storing perishable food product are identified 1.5. Packing materials used are confirmed as suitable for perishable food product
2. Specify packing,	2.1. Equipment and facilities available for packing,

ELEMENT	PERFORMANCE CRITERIA
handling and storage processes	handling and storage of perishable food product are identified and cost-benefit analysis conducted to assess potential value to workplace operations 2.2. Equipment and facilities are specified for work operations 2.3. Processes for packing, handling and storing perishable food product are specified 2.4. Processes specified are in accordance with workplace environmental guidelines 2.5. Labelling and documentation requirements are specified 2.6. Workplace processes and operating procedures are documented and communicated to personnel
3. Manage problems with perishable food product	3.1. Common problems with perishable product are identified and likely causes determined 3.2. Equipment and procedures are assessed to identify contributing factors to food problems 3.3. Problems are identified and addressed in accordance with workplace procedure 3.4. Out-of-specification processes or outcomes are documented 3.5. Opportunities for improvement are identified and investigated within level of technical responsibility 3.6. Proposals for improvement are developed and implemented within level of authority and according to company procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify packing, handling and storage requirements for perishable product
- identify the quality assurance systems in place to ensure that the product meets customer and legal requirements
- identify factors that affect shelf-life of the perishable product and the features of

REQUIRED SKILLS AND KNOWLEDGE

- packing design that preserve the product
- identify problems that occur and investigate likely causes
- determine appropriate corrective action to prevent non-conformance
- identify packing materials suitable for use with perishable food products
- identify legal requirements relating to perishable product, including Food Standards Code requirements and other legislation relevant to the product
- identify pathogens and spoilage that can occur in perishable food and the conditions required for these to occur
- identify features intrinsic to the food type, according to food type, such as pH, water activity, nutrient content, presence of microbiological compounds, respiration rate and biological structure
- identify extrinsic factors, such as processing method, temperature, water loss/humidity, maturity (applies to maturity of fruit and vegetables when harvested), handling, cleaning, sanitation and personal hygiene practices and gaseous composition of the storage atmosphere
- identify food spoilage indicators, such as microbial contamination, enzymic browning and sensory degradation of characteristics such as flavour, aroma, colour and texture
- identify factors that influence selection of packing and storage processes, including suitability for use with the food products to be packaged, compatibility with packing technology, cost, environmental features and consumer safety/tamper evidence
- describe the significance of factors, such as moisture and temperature in promoting/preventing product spoilage
- identify typical problems that occur with perishable food product and outline likely causes and appropriate response options within level of responsibility
- identify relevant sources of technical expertise and related authority levels to address issues
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

Knowledge of:

- properties of packing processes designed to protect perishable product and extend shelf-life
- relevant regulations, codes of practice and legislative requirements, including local and international regulations relevant to the handling and storage of perishable food products
- relevant occupational health and safety (OHS) and environmental protection procedures and regulations
- workplace procedures for the planning and management of the handling and

REQUIRED SKILLS AND KNOWLEDGE

- storage of perishable food products
- problems that may occur during the planning and management of the handling and storage of perishable food products and action that can be taken to resolve or report the problems
- risks and hazards related to the handling and storage of perishable food products and ways of controlling the risks involved
- costs of equipment and facilities for handling and storing perishable food product
- pathogens and spoilage that can occur in perishable food and the conditions required for these to occur
- impact of extrinsic factors on perishable food products, such as temperature, water loss/humidity, maturity (applies to maturity of fruit and vegetables when harvested), handling, cleaning, sanitation and personal hygiene practices and gaseous composition of the storage atmosphere
- characteristics of product and its behaviour when packed, handled and stored over the shelf-life of the product
- typical problems that occur, and likely causes and appropriate response options

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- analyse packing, handling and storage requirements for perishable food product
- specify processes and equipment to achieve workplace performance and quality outcomes
- analyse and confirm safety aspects of processes and equipment
- analyse non-conformances, problems and determine probable cause
- propose improvements to the system.

EVIDENCE GUIDE	
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • packaging specifications • product, packaging components and consumables • packaging process equipment • relevant workplace operating procedures • communication systems • workplace information recording systems, requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Product packaging and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of OHS and environmental impact

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4002A Manage controlled atmosphere storage

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge to determine and maintain conditions required for controlled atmosphere storage of perishable produce.

Application of the Unit

Application of the unit	This unit has application in fresh produce storage or processing environments. It would typically be performed by supervisors and senior operators or technicians responsible for ensuring that conditions in controlled atmosphere storage are set and maintained at the correct levels for the required produce.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Analyse features and parameters of controlled atmosphere storage	1.1.Type of storage facility, components and construction are identified 1.2.All features of the facility are examined and operational processes identified 1.3.Cooling mechanisms and processes are examined 1.4.Implications and parameters of controls are examined and range determined for fresh fruit product 1.5.Consequences of inaccurate controls are identified 1.6.Procedures for opening and closing doors and risks associated with air tight chambers are identified 1.7.Chemicals associated with the storage process are identified 1.8.Occupational health and safety (OHS) risks and control measures relating to safe operation of controlled atmosphere storage are identified 1.9.Storage documentation is confirmed according to workplace requirements
2. Determine operational requirements for storage	2.1.Storage requirements for fresh produce product are identified 2.2.Storage settings and monitoring schedule are established 2.3.Specifications are documented according to

ELEMENT	PERFORMANCE CRITERIA
	workplace practice
3. Set and monitor controlled atmosphere storage	3.1. Operational equipment is checked to ensure readiness 3.2. Settings for controlled atmosphere storage facility are entered according to specifications 3.3. Cooling is conducted at a rate and temperature suitable to produce requirements 3.4. Test equipment is calibrated 3.5. Temperature, air tightness and atmosphere levels are tested daily to ensure accurate levels and details recorded 3.6. Chemicals used in the storage process and associated risks and handling requirements are identified 3.7. Work is conducted in accordance with workplace environmental guidelines 3.8. Non-compliances and variances in temperature and atmosphere are recorded 3.9. Equipment maintenance requirements are identified and documented
4. Complete documentation	4.1. All workplace documentation is completed and files maintained as required 4.2. Quality control documentation is completed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information to determine storage requirements
- identify storage requirements including temperature limits, atmosphere, minimum duration at given temperatures, segregation and co-storage requirements
- select, fit and use personal protective clothing and/or equipment
- conduct testing of atmosphere and temperature
- read instrumentation, such as temperature gauges, digital and non-digital, O₂ and CO₂ test equipment, to monitor stores and zone temperatures
- identify and report out-of-specification temperatures in storage facilities

REQUIRED SKILLS AND KNOWLEDGE

- take corrective action in response to out-of-specification temperatures, including implementation of procedures to segregate damaged or potentially unsafe product
- complete records of stock receipt and transfer as required
- maintain work area to meet housekeeping standards
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge***Knowledge of:***

- OHS hazards and controls, including the purpose and limitations of protective clothing and equipment, conditions for working in confined spaces and modified atmospheres, safe use of handling equipment, use of hazardous chemicals and air tightness
- implications of expansion and contraction of rooms
- temperature controlled storage facilities and features in the work area, including temperatures required for a variety of produce
- acceptable temperature and atmosphere ranges and consequences of failing to meet these ranges, such as requirements for gradual temperature change
- food safety and quality consequences of stock temperature control requirements not being met
- monitoring procedures and instrumentation, including use of thermometers or other measuring and testing instrumentation
- notification, recording and reporting requirements
- operating procedures for goods handling equipment as required
- housekeeping requirements for work area
- recording requirements and procedures

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance

EVIDENCE GUIDE	
	with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify features and control processes for controlled atmosphere storage • determine and enter settings for controlled atmosphere storage according to requirements for fresh produce • conduct tests to monitor temperature, air tightness and atmosphere of storage facility to ensure standards are maintained and act on any inconsistencies • apply OHS control measures • identify and act on non-conformances • complete workplace documentation • apply food safety procedures.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • personal protective clothing and equipment • work procedures, including advice on safe work practices, food safety, quality and environmental requirements • storage specifications • stock handling and rotation systems • controlled atmosphere storage facilities • stock information recording system and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. An example could be: • MEM13003B Work safely with industrial chemicals and materials.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures	Work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Legislative requirements	Legislative requirements are typically reflected in procedures and specifications. Legislation relevant to this industry includes: • relevant commonwealth, state and territory plant health and plant products legislation • legislation associated with the licensing and operation of load shifting equipment • refrigeration regulation • the Food Standards Code, including labelling, weights and measures legislation • legislation covering food safety, environmental management, OHS, anti-discrimination and equal opportunity • work in confined spaces regulations
Workplace information	Workplace information may include: • standard operating procedures (SOPs) • specifications • production schedules and instructions • manufacturers' advice • standard forms and reports
OHS risks	OHS risks include: • temperature • O₂ and CO₂ levels • chemicals • refrigerant • gases • nitrogen

RANGE STATEMENT	
	• spillages
Equipment	Equipment may include: • condensers • evaporative and air coolers • electronic and manual testing equipment • generator • scrubber • nitrogen flushing equipment

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4003A Control food contamination and spoilage

Modification History

November 2011: updated to include correct prerequisite.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to prevent food contamination and spoilage. It includes management of food safety and cleaning and sanitation programs.

Application of the Unit

Application of the unit	This unit has application at a level where a person would be expected to oversee control measures across a production site or facility.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFFS3001A	Monitor the implementation of quality and food safety programs* <i>FDFFS2001A Implement the food safety program and procedures</i>

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify legal responsibilities to produce quality, safe food	1.1. Legal and ethical responsibilities to produce safe food are identified 1.2. Legal, company and customer quality standards for products are identified
2. Identify common causes of food poisoning and contamination	2.1. Food-borne pathogens and contamination that can occur in processed food are identified 2.2. Patterns of contamination and spoilage are traced through processing, storage and shelf-life for a given product 2.3. Conditions required for contamination to occur are identified 2.4. Laboratory results used to detect the presence of contamination and/or related conditions are analysed and applied
3. Manage control measures to eliminate and/or minimise the risk of contamination	3.1. Control measures related to receivals, handling and processing, storage and/or transport stages to guarantee food safety in the workplace are identified 3.2. Control measures to prevent food contamination and spoilage are documented and followed
4. Manage cleaning and sanitation regimes	4.1. The main types of cleaners and sanitisers used in the food industry are identified 4.2. Application methods and related materials, labour and equipment requirements are identified

ELEMENT	PERFORMANCE CRITERIA
	4.3. Cleaning and sanitation methods and regimes are assessed for environmental impact 4.4. Appropriate cleaning and sanitation methods are selected to suit a given product, processing method and risk factors and to ensure minimal impact on the environment 4.5. Inspection and/or test methods are in place to confirm the effectiveness of the cleaning and sanitation program 4.6. Responsibilities for cleaning and sanitation are documented and communicated

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify the requirements of legislative responsibilities relating to food production, including food composition, specification of safe handling, processing, storage and transportation methods as appropriate, and establishment of related programs, such as cleaning and sanitation, personal hygiene practices, training and food traceability and recall procedures
- identify how legislative requirements have been applied in a production context (this will typically be based on the food safety program (HACCP) for a production process)
- identify related roles and responsibilities for implementing, maintaining and reviewing the food safety program in a production environment
- identify the types of pathogenic bacteria, viruses and chemicals that can occur in food, including the main types of pathogens and contamination that can occur for a given product and production method, as well as the specific strains that can occur
- identify the main types and causes of food spoilage that can occur, including:
 - bacterial growth
 - growth of yeasts and moulds
 - fermentation
 - enzymic reactions
 - physical degradation (oxidation)
- identify the conditions that cause or promote the growth of pathogens and other

REQUIRED SKILLS AND KNOWLEDGE

- forms of contamination and food spoilage
- identify typical control measures used to prevent contamination from occurring, including microbiological, chemical and physical types of contamination
 - distinguish between measures to control pathogenic growth (critical control measures) and those used to prevent other forms of contamination
 - interpret test results and apply this information in a production context
 - identify the types of contamination that can occur and the controls in place to prevent or minimise the likelihood of contamination occurring (where a food safety plan has been developed, compare the outcomes of this process with the provisions of the food safety plan)
 - review workplace information to ensure that critical control measures and procedures are documented in a form appropriate to meet company and legal requirements and that quality control measures and procedures are documented to meet company and customer requirements (documentation includes action to be followed in the event of an incident or emergency and should be reflected in food safety plans and operating procedures)
 - identify the cleaning and sanitation requirements/standards appropriate for a food processing environment
 - identify the types of cleaners, sanitisers and combined cleaning/sanitation agents used in the food industry and related application methods
 - evaluate the appropriateness of available methods to a given production process/product type
 - develop and/or review a cleaning regime suited to a given production process, including the nature, frequency and methods of cleaning and sanitation required, such as removal of residues as appropriate, inspection and/or test methods to confirm effectiveness and allocation of roles and responsibilities (the cleaning regime should balance the need to ensure effective cleaning and sanitation at the same time as minimising the disruption to production)
 - identify the possible consequences of failing to follow the cleaning regime
 - develop and/or review procedures to describe the methods, frequency, recording, inspection and test requirements related to implementation of cleaning and sanitation
 - analyse and interpret test results relating to cleaning and sanitation
 - for a given type of microbacterial and/or chemical contamination, identify likely causes, relevant tests and review of the effectiveness of existing controls, including cleaning and sanitation measures
 - use communication skills to interpret and complete work information to support operations of work team or area
 - demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

Knowledge of:

REQUIRED SKILLS AND KNOWLEDGE

- the types of pathogenic bacteria, viruses and chemicals that can occur in food
- the main types of pathogens and contamination that can occur
- the main types and causes of food spoilage that can occur, including:
 - bacterial growth
 - growth of yeasts and moulds
 - fermentation
 - enzymic reactions
 - physical degradation (oxidation)
- the conditions that cause or promote the growth of pathogens and other forms of contamination and food spoilage
- criteria for evaluation to take account of the effectiveness of the method in controlling contamination risk, equipment requirements, cost and other criteria as identified by the workplace.
- issues of compatibility of cleaning agents with materials used in equipment/instrument fabrication
- the legal responsibilities to maintain food production facilities in a clean and sanitary condition, the difference between a surface that appears clean and one that is microbiologically described as clean, and use of terms, such as sterile and commercially sterile
- laboratory procedures used to avoid erroneous results, including practices such as use of negative controls and the purpose of false positives/false negatives
- common terms, such as:
 - plate count
 - culture
 - colony
 - bacteriophage
 - spores
 - yeasts and moulds
 - water activity

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the

EVIDENCE GUIDE	
	assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify legal, company and quality standards for food products • identify common causes of contamination and poisoning, and techniques used to verify status • identify and manage control measures used to address risks • manage cleaning procedures to ensure workplace standards meet food safety requirements.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • food safety plan and related information, including operating procedures, cleaning and sanitation regimes/plans • laboratory test results • a given production process and product as the basis for tracing contamination/spoilage and identifying control measures • cleaning and sanitation methods, equipment and procedures .
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating

RANGE STATEMENT	
conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Food-borne pathogens and contamination	Food-borne pathogens and contamination includes: those listed in the World Health Organisation(WHO) table on 'Food-borne pathogens and chemicals of public health importance'. This is reproduced in a number of food safety-related documents, including 'Food Safety Standards Costs and Benefits' ANZFA, May 1999
Food-related legislation	Food-related legislation relevant to this unit includes: - relevant state, territory and federal food safety legislation - the Food Standards Code
Identification	Identification can be based on active ingredients and includes but is not limited to: - alkaline and acid-based detergents - steam/hot water-based methods of sanitation - bleach-based sanitisers - quaternary ammonium compounds (QUATs) - alcohol-based sanitisers - use of UV light, gamma radiation and combined cleaners/sanitisers

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4004A Apply basic process engineering principles to food processing

Modification History

September 2012: clarified pre-requisite information.

Unit Descriptor

Unit descriptor	This unit of competency provides an introduction to process engineering concepts. It covers the skills and knowledge required to map production processes, measure outputs (yields, material variances) and apply an understanding of the basic principles of systems and equipment commonly used in the food processing industry.

Application of the Unit

Application of the unit	Application of this unit includes systems and equipment used for heat transfer, refrigeration, pumping and evaporation/drying.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFOP2030A	Operate a process control interface
	FDFTEC4007A	Describe and analyse data using mathematical principles* <i>FDFOP2015A Apply principles of statistical process control*</i>

Prerequisite units		
		<i>FDFOP2061A Use numerical applications in the workplace</i>

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Map a production process	1.1. The scope of a production process to be mapped is identified 1.2. Appropriate process mapping symbols are selected and used 1.3. A map is developed that identifies the relationship of each step in the process
2. Calculate yields and efficiencies of a production process	2.1. Inputs to and outputs of a production processing system are identified 2.2. Information required to monitor performance of a production process is collected 2.3. Calculate yields, efficiencies and material variances
3. Apply principles of fluid flow to a production process	3.1. Fluid properties that affect flow are identified 3.2. Components and related equipment used in the pumping system are identified 3.3. Features of the system design that affect performance of the pumping system are identified

ELEMENT	PERFORMANCE CRITERIA
	3.4. The effect of pumping on the fluid properties is identified 3.5. The operating capacity of pumping systems used in the production process is established 3.6. Procedures for the safe use of pumping equipment are reviewed and/or established
4. Apply principles of heat transfer to a production process	4.1. Types of heat transfer are identified 4.2. Methods and related equipment used to transfer heat are identified 4.3. Types of heat transfer media are identified 4.4. Operating principles of cooling, chilling and freezing processes are identified 4.5. The effect of heat transfer on product/material properties is identified 4.6. The operating capacity of heat transfer equipment used in the production process is established 4.7. Procedures for the safe use of heat transfer equipment are reviewed and/or established
5. Apply principles of evaporation to a production process	5.1. Methods and related equipment used for evaporation are identified 5.2. The effect of evaporation on product/material properties is identified 5.3. Tests used to determine the concentration of a liquid are identified 5.4. The operating capacity of evaporation equipment used in the production process is established 5.5. Procedures for the safe use of evaporation equipment are reviewed and/or established
6. Apply principles of drying to a production process	6.1. Methods and related equipment used for drying are identified 6.2. The effect of drying on product/material properties is identified 6.3. Tests used to determine moisture content of materials and/or product are identified 6.4. The operating capacity of drying equipment used in the production process is established 6.5. Procedures for the safe use of drying equipment are reviewed and/or established
7. Apply principles of process control to management of	7.1. Sensors and instrumentation providing input information to the control system are located

ELEMENT	PERFORMANCE CRITERIA
production processes	7.2. Consequences of a system malfunction are identified

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- establish and apply process mapping protocols and symbols used in the workplace to describe a production process
- identify the inputs to a production process and the outputs of a production process
- identify the data required to calculate yields, efficiencies and material variances
- locate sources of information in the workplace, such as printing reports from information management systems
- calculate yields, efficiencies and material variances using software or application of a formula
- identify properties of fluids that affect fluid flow, including viscosity, temperature and size, and distribution of particulates
- identify types of pumping equipment appropriate for different types of liquids
- identify tests or measures taken to monitor operation of pumps and related performance information
- apply information to describe pump system capacity in a production process
- identify features in the pumping system design that affects pumping efficiencies, including length of pipework, number and placement of valves and fittings, height of inlet and discharge points, internal surface and diameter of the pipe
- identify possible effects of pumping on liquid properties
- identify operational and safety features of pumps used in a production process, including inspections required to identify signs of faulty performance and/or wear
- review and/or establish procedures to define safe pump operation and maintenance
- identify heat transfer methods and types of equipment commonly used in the food industry, such as:
 - retorts
 - jacketed vessels/kettles
 - heat exchangers, including plate, tubular and scraped surface
 - cooling tunnels
 - refrigeration circuits
 - chillers

REQUIRED SKILLS AND KNOWLEDGE

- freezers
- identify typical applications in the food industry and the heat transfer medium used for each heat transfer method
- identify the effects of heat transfer on properties of materials/products, including possible consequences where the heat transfer process is not operated within specified parameters
- distinguish between conduction, convection and radiation in the application of heat
- identify the properties of heat and steam, including an understanding of the terms latent heat, saturated and supersaturated steam
- identify the heat transfer requirements and equipment used in a production process, including mapping the stages and equipment used in a heat transfer process and holding stages
- identify tests or measures taken to monitor performance of heat transfer equipment and related expression of performance information
- apply information to describe heat transfer process capacity in a production process
- identify operational and safety features of heat transfer equipment used in a production process, including inspections required to identify signs of faulty performance and/or wear
- review and/or establish procedures to define safe operation and maintenance of heat transfer processes and equipment used in a production process
- identify the effects of evaporation on product, such as:
 - physical property changes such as crystallisation, increased solids/viscosity
 - intensification of flavour and concentration of acids
 - changes in microbiological characteristics due to application of heat and reduction of moisture/water activity
- identify the equipment components of an evaporation process, such as:
 - heat transfer surface (rising film, falling film, forced circulation and plate)
 - vapour separator
 - vapour condenser
 - vacuum unit
- map the stages and equipment used in an evaporation process
- identify tests or measures taken to monitor performance of an evaporation process and related expression of performance information
- apply information to describe evaporation process capacity in a production process
- identify tests carried out to determine material/product solids and related terms (common test methods include baume, refractive index and brix)
- identify the processing parameters, time required to achieve the target result and steam required
- identify operational and safety features of evaporation equipment used in a production process, including inspections required to identify signs of faulty performance and/or wear
- review and/or establish procedures to define safe operation and maintenance of

REQUIRED SKILLS AND KNOWLEDGE

- evaporation processes and equipment used in a production process
- identify the effects of drying on product, such as:
 - changes that occur at each stage of the drying process
 - reduction in weight and bulk
 - changes in microbiological characteristics due to application of heat and reduction of moisture/water activity
- identify the equipment components of a drying process, such as:
 - hot air drying (fluidised bed driers, spray driers, belt trough driers, and air lift driers)
 - freeze drying (vacuum)
- map the stages and equipment used in a drying process
- identify tests or measures taken to monitor performance of a drying process and related expression of performance information
- describe drying process
- identify tests carried out to determine process outcomes on material/product
- identify the processing parameters, time and energy required to achieve the target result
- identify operational and safety features of drying equipment used in a production process, including inspections required to identify signs of faulty performance and/or wear
- review and/or establish procedures to define safe operation and maintenance of drying processes and equipment used in a production process
- identify the main types of sensors used in food processing to provide input data to control systems and how these sensors operate
- identify the location and operation of sensors and related data input devices to a control system on equipment used in a production process
- for a given production process, identify the criticality of system control and consequences of a system malfunction or power outage
- develop and/or review procedures to be followed in the event of a system malfunction or power outage
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

Knowledge of:

- the basic operating features and components of pumps commonly used and typical applications, such as:
 - rotodynamic (centrifugal) pumps
 - positive displacement pumps, including reciprocating piston pumps, rotary

REQUIRED SKILLS AND KNOWLEDGE

- pumps (including gear and lobe pumps), screw pumps, eccentric rotor pumps (including progressive cavity or mono pumps) and flexible vane pumps
- related components of the pumping system, including valves, taps and pipework, and where required, Australian standards and workplace protocols for indicating materials carried by pipework
 - features in the pumping system design that affects pumping efficiencies, including length of pipework, number and placement of valves and fittings, height of inlet and discharge points, internal surface and diameter of the pipe
 - the following terms:
 - pressure and pressure drop
 - velocity
 - head
 - typical applications in the food industry and the heat transfer medium used
 - equipment components of a drying process
 - heat transfer requirements and equipment used in a production process
 - tests carried out to determine process outcomes on material/product
 - operational and safety features of drying equipment
 - inspections required to identify signs of faulty performance and/or wear
 - main types of sensors used in food processing to provide input data to control systems and how these sensors operate

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- map a production process
- apply engineering principles to a food production context
- perform required calculations.

EVIDENCE GUIDE	
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • methods and related software systems as required for collecting data and calculating yields, efficiencies and material variances appropriate to production environment • tests used to report relevant product/process information and recorded results.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Uses of processing equipment and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of occupational health and safety (OHS) and environmental impact
Calculation	Calculation of yields, efficiencies and material variances may involve:

RANGE STATEMENT

	• use of software programs and systems, such as SAP • application of a relevant formula

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4005A Apply an understanding of food additives

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to recognise the characteristics and functions of food additives, preservatives, colours and flavours used in food products.

Application of the Unit

Application of the unit	This unit is designed to provide an overview of food additives. It is not designed to meet the competency requirements of the person who specifies additives, preservatives, colours or flavours to be used in food. Analysis of the properties of food additives may also be done by a specialist.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify additives used in food	1.1.Types of food additives and common additives used in food products are identified 1.2.Functions of food additives are identified 1.3.Legal requirements relating to use of food additives are identified 1.4.Legal and quality consequences of incorrect additive addition are identified
2. Manage use of additives in a production process	2.1.Additives used in product range produced in the production process are identified 2.2.Methods of addition are suited to food additive and production requirements 2.3.Procedures for safe handling and addition of food additives are reviewed and/or established 2.4.Handling, use and disposal of additives is conducted in accordance with environmental standards

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

REQUIRED SKILLS AND KNOWLEDGE

Required skills

Ability to:

- identify common food additives and group them by function
- identify common types of additives used in the food industry
- identify the functions of food additives commonly used in food, such as:
 - texture modifying agents
 - organoleptic and nutritional modifying agents, including flavours, colours, flavour enhancers, sugar-free sweeteners, minerals, vitamins and food acids
 - shelf-life enhancing agents, including preservatives, anti-oxidants and food acids
 - technological aids, including humectants, enzymes, propellants, flour treatment, caking agents and bleaching agents
- identify additives, colours and flavours used in product range produced in the workplace, including:
 - coding system used to describe food additives, colours and flavours
 - legal requirements relating to additives used as established by the Food Standards Code
 - function in the food product
 - typical quantities used and related units of measurement
 - preparation requirements, and forming and breaking emulsions, and preparation of solutions where required
 - addition systems and related equipment requirements
 - health and safety issues related to handling of additives
 - process recording requirements
 - consequences of incorrect additive addition, including the Food Standards Code as it relates to food additives used in a given product range
- review and/or establish procedures to describe storage, handling and processing conditions that affect the characteristics of colours and flavours, such as:
 - changes in pH
 - temperature change
 - exposure to light
 - exposure to humidity
 - packaging materials
- review and/or establish procedures to describe the method of preparation and addition of additives to food products produced in the workplace
- provide examples of incorrect addition of food additives that could occur in the production process, determine appropriate corrective action within company policy and level of authority
- use communication skills to interpret and complete work information to support

REQUIRED SKILLS AND KNOWLEDGE

- operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge***Knowledge of:***

- types of food additives and common additives used in food products
- the functions of food additives commonly used in food
- coding system used to describe food additives, colours and flavours
- legal requirements relating to additives used as established by the Food Standards Code
- typical quantities used and related units of measurement
- preparation requirements, such as forming and breaking emulsions, and preparation of solutions
- addition systems and related equipment requirements
- occupational health and safety (OHS) issues related to handling of additives
- consequences of incorrect additive addition, including Food Standards Code as it relates to food additives used in a given product range
- the quality and food safety hazards of incorrect addition
- handling and processing conditions that affect the characteristics of colours and flavours

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify legal, company and quality standards for food additives
- identify main additives and groupings
- describe the function and user requirements for

EVIDENCE GUIDE	
	additives manage the use of additives to ensure product quality standards are achieved.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: - product specifications, including advice on additives - food standards code - product range and related production processes - workplace information recording systems, requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Handling of food additives, preservatives, colours and flavours and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of OHS and environmental impact
Groupings	Groupings include but are not limited to: preservatives

RANGE STATEMENT

	• anti-oxidants • acidulants • organoleptic and nutritional modification agents • colours and flavours, including synthetic and natural, oil and water soluble and lakes (dispersion in oil - applying to colours only) • technological aids

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4006A Apply an understanding of legal requirements of food production

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to ensure that food production operations comply with legal requirements.

Application of the Unit

Application of the unit	The intent of this unit is to introduce the range of legal requirements applying to food processing activities and facilities. It does not include requirements related to environmental management, occupational health and safety (OHS) and food safety. These areas are covered by other units. The person who undertakes this unit may not be directly responsible for designing premises, equipment or procedures to comply with legislation but should be aware of the existence of legislation, its intent and the arrangements in place to ensure compliance.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Manage production systems to meet legislative requirements relating to product and processing	1.1. Relevant legislation and regulations that apply to food production, packaging and labelling are identified 1.2. The purpose and intent of relevant legislation is identified 1.3. The roles and responsibilities of authorities responsible for administering legislation are identified 1.4. Procedures to support compliance with legal requirements are established and/or reviewed
2. Manage production facilities to meet legislative requirements relating to food premises, equipment design and storage facilities	2.1. Identify relevant legislation and regulations that apply to food premises, storage facilities and equipment are identified 2.2. Identify the purpose and intent of relevant legislation are identified 2.3. Identify the roles and responsibilities of authorities responsible for administering legislation are

ELEMENT	PERFORMANCE CRITERIA
	identified 2.4. Procedures to support compliance with legal requirements are established and/or reviewed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify the legal responsibilities of a food processing company, including responsibilities relating to:
 - product content (Food Standards Code)
 - product packaging and labelling, including use of nutritional information panels (Food Standards Code)
 - design requirements of food premises and equipment
 - requirements of storage facilities used for materials, ingredients and final product
 - other requirements as appropriate to the product and/or market (e.g. import and/or export legislation)
- identify and/or develop specifications and procedures to ensure that legal responsibilities related to product content and packaging are achieved
- inspect plant design to identify potential hazards that could be introduced as a result of equipment design and configuration, such as overhead pipes or equipment where dust could collect and fall into food
- where hazards are identified, apply the hierarchy of control to identify opportunities to remove or control the risk
- identify storage facilities across a production site
- identify the dangerous goods stored on site and confirm that storage of these goods (type and quantity) meets legal requirements
- confirm that employees required to handle chemicals and dangerous goods are advised of the associated risks, that this information is available in a form appropriate to the audience and that material safety data sheets are available
- develop and/or review recording systems to confirm compliance with legislative requirements and ensure that employees responsible for recording information are informed of these responsibilities
- establish internal review/audit procedures to confirm that legislative responsibilities are met

REQUIRED SKILLS AND KNOWLEDGE

- identify the relevant authority responsible for administering the legislation
- identify the rights and responsibilities of related officers to access the production site
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge***Knowledge of:***

- legal responsibilities of a food processing company relating to product content and packaging
- the purpose and intent of relevant legislation
- potential hazards that could be introduced as a result of equipment design and configuration
- associated risks in handling chemicals and dangerous goods
- recording requirements to comply with legislative requirements
- relevant authorities responsible for administering legislation and their roles

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify legal requirements for the packing, production and labelling operations of a food production enterprise
- assess systems, roles and procedures in place
- identify legal requirements for facilities and equipment and assess compliance
- establish and/or review procedures to support

EVIDENCE GUIDE	
	compliance with legal requirements.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • workplace processes and procedures • workplace documentation, including specifications and procedures • relevant legislation • communication systems • workplace information recording systems, requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. An example could be: • FDFPPL4008A Manage internal audits.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Legislation	Legislation to be covered by this unit includes: • Food Standards Code • Australian standards • food safety legislation (including provisions covering the design of food premises and equipment) • customs and excise legislation (for alcohol-based ingredients/materials)

RANGE STATEMENT	
	• dangerous goods legislation • import and export legislation • additional legislation as appropriate to product, process and market • environmental protection legislation

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4007A Describe and analyse data using mathematical principles

Modification History

November 2011: updated to include correct prerequisite.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to apply mathematical principles to interpret data relating to properties and production of food products.

Application of the Unit

Application of the unit	This unit builds on an understanding of common units of measurement, formulae and mathematical skills related to production activities.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFOP2015A	Apply principles of statistical process control* <i>FDFOP2061A Use numerical applications in the workplace</i>

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify common units of measurement and dimensions used to describe physical properties of materials and food	1.1. SI units of measurement and related unit symbols are identified 1.2. Common formulae used to measure characteristics of food are identified and applied 1.3. Calculations involving fractions and ratios are performed
2. Apply linear algebra to analyse workplace information	2.1. Given two known values, an unknown value is calculated 2.2. The principles of transposing values are applied to solve workplace problems
3. Use graphs to analyse workplace information	3.1. Data analysis and presentation requirements are identified 3.2. Graphs are generated to analyse and display workplace information 3.3. A process control chart is constructed

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.

REQUIRED SKILLS AND KNOWLEDGE

Required skills

Ability to:

- identify the fundamental units (SI) of measurement (metres, kilograms and seconds)
- identify common derived units/measurements, related formulae and their application in a food processing context, such as:
 - density, specific gravity
 - viscosity
 - temperature
 - volume, weight and mass
 - velocity
 - other measures as appropriate to a production process
- apply relevant formulae to measure physical characteristics of food products and/or processes
- select production calculation requirements, such as the adjustment of a recipe formulation, to:
 - select required formulae
 - express the problem as an equation
 - identify the known and unknown values
 - manipulate equations by transposing values as required
 - convert units into compatible formats (i.e. SI units, multiples and sub-multiples)
 - calculate of percentages and ratios
 - conduct the calculation to obtain a solution
 - record the result in the appropriate units and level of detail
- identify graphs commonly used in the workplace and relevance to displaying workplace information
- construct charts to analyse and illustrate workplace information, such as use of relevant software
- calculate standard deviation for a given data set
- apply an understanding of standard deviation to determine capability of a process
- identify the target (mean value) for the process
- identify upper and lower control limits to provide for 98% of units to fall within the limits
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

REQUIRED SKILLS AND KNOWLEDGE**Required knowledge****Knowledge of:**

- SI units of measurement and related unit symbols
- common formulae used to measure characteristics of food
- principles of transposing values to solve workplace problems
- relevant formulae to measure physical characteristics of food products and/or processes
- processes for developing charts and graphs
- calculations to determine unknown values, percentages and ratios, standard deviation, conversion of units into compatible formats, target (mean value) for the process, upper and lower control limits

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify SI units of measurement
- identify common derived units/measurements, related formulae and their application in a food processing context
- apply relevant formulae to measure physical characteristics of food products and/or processes
- calculate standard deviation
- construct charts
- identify mean value
- identify upper and lower control limits.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

EVIDENCE GUIDE	
	- workplace processes and procedures - workplace documentation, including conversion charts, sampling plan and control chart formats, related data collection methods, such as log sheets, and relevant formulae to be applied to a production process.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. An example could be: FDFPPL4005A Establish process capability.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Common measurements	Common measurements include but are not limited to: - density - specific gravity - volume - weight - mass - speed
Graphs	Graphs include but are not limited to: - statistical process control (SPC) charts - x-y charts

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4008A Apply principles of food packaging

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to oversee packaging operations and assess the nature and likely causes of packaging problems.

Application of the Unit

Application of the unit	This unit covers a range of packaging technologies and is appropriate for a senior operator or manager responsible for overseeing packaging processes. The unit includes a basic understanding of the principles of modified atmosphere packaging processes. This unit is not designed to meet the competency requirements of the person responsible for determining packaging specifications, nor does it cover food packaging and labelling legislation. Where this is a requirement, refer to FDFTEC4006A Apply an understanding of legal requirements of food production.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify characteristics of packaging suitable for use with food products	1.1. Packaging materials suitable for food application are identified 1.2. Packaging interactions with food products are identified 1.3. Environmental impact and handling features of packaging materials are identified 1.4. Customer and legal requirements of packaging are identified 1.5. Packaging material characteristics meet the needs of the food to be packaged
2. Apply packaging knowledge in a production environment	2.1. Properties of packaging materials used in a packaging process are identified 2.2. Costs of packaging materials are identified 2.3. Procedures for safe operation of the packaging process are established and/or reviewed 2.4. Out-of-specification packaging outcomes are analysed to identify probable cause 2.5. Opportunities for improvement to materials, processes or environmental impacts are identified and investigated within level of technical responsibility

ELEMENT	PERFORMANCE CRITERIA
	2.6. Proposals for improvement are developed and implemented within level of authority and according to company procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify properties of packaging materials as specified in packaging specifications for product handled
- identify the quality assurance systems in place to ensure that the packaged product meets customer and legal requirements
- identify factors that affect shelf-life of the packaged product and the features of packaging design that preserve the product
- identify problems that occur in the packaging process and investigate likely causes
- determine appropriate corrective action to prevent packaging non-conformance
- identify packaging materials suitable for use with food products, including plastics, paper-based materials, glass and metal-based materials
- describe the purpose of packaging and the properties of packaging materials designed to protect product and extend shelf-life, including the role of packaging to provide:
 - protection of product from contamination (microbial, pest infestation, and physical damage)
 - barriers (atmospheric, moisture, flavour and light)
 - package sealability and seal integrity
 - easy-to-open access to the product
 - information to the consumer about the product
 - market appeal
- identify legal requirements relating to packaged product, including Food Standards Code requirements and other legislation relevant to the product
- identify pathogens and spoilage that can occur in packaged food and the conditions required for these to occur
- identify features intrinsic to the food type, according to food type, such as pH, water activity, nutrient content, presence of microbiological compounds, respiration rate (fresh fruit and vegetables) and biological structure
- identify extrinsic factors, such as processing method, temperature, water

REQUIRED SKILLS AND KNOWLEDGE

- loss/humidity, maturity (applies to maturity of fruit and vegetables when harvested), handling, cleaning, sanitation and personal hygiene practices and gaseous composition of the storage atmosphere
- identify food spoilage indicators, including microbial contamination, enzymic browning and sensory degradation of characteristics, such as flavour, aroma, colour and texture
 - describe the features of packaging material requirements of products handled in the workplace, including coated packaging products, and active/interactive packaging films
 - identify factors that influence selection of packaging materials, including market appeal, suitability for use with the food product/s to be packaged, compatibility with packaging technology, cost, environmental features, consumer safety/tamper evidence
 - identify packaging methods and technologies designed to extend shelf-life, including active packaging materials, vacuum packing, gas flushing or sparging and modified atmosphere packaging (MAP)
 - describe the significance of factors, such as moisture and temperature in promoting/preventing product spoilage
 - identify typical problems that occur in the packaging process, and outline likely causes and appropriate response options within level of responsibility (where MAP is used, this includes pack collapse and may include fogging - relevant to fresh fruit and vegetables)
 - identify relevant sources of technical expertise and related authority levels to address packaging issues
 - for MAP packaging processes, describe the effect of gas composition on the packaged product according to enterprise procedures, including the role of the most commonly used gases in food packaging including carbon dioxide, oxygen and nitrogen and the reaction between gases, the packaged product and the packaging material
 - use communication skills to interpret and complete work information to support operations of work team or area
 - demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

Knowledge of:

- properties of packaging materials designed to protect product and extend shelf-life
- packaging interactions with food products
- costs of packaging materials
- legal requirements relating to packaged product, including Food Standards Code requirements and other legislation relevant to the product
- features of packaging design that preserve the product
- pathogens and spoilage that can occur in packaged food and the conditions required

REQUIRED SKILLS AND KNOWLEDGE

for these to occur

- impact of extrinsic factors on food products, such as processing method, temperature, water loss/humidity, maturity (applies to maturity of fruit and vegetables when harvested), handling, cleaning, sanitation and personal hygiene practices and gaseous composition of the storage atmosphere
- characteristics of product and its behaviour when packaged over the shelf-life of the product
- factors that influence selection of packaging materials
- typical problems that occur in the packaging process, and likely causes and appropriate response options
- the characteristics of product handled and its behaviour when packaged over the shelf-life of the product, for example, reactions that occur when canning some types of vegetables requiring appropriately coated cans, respiration that is ongoing after fresh fruit and vegetables are packaged requiring gas permeable packaging materials, and the effect of high moisture and high fat content products on the packaging process where MAP packaging processes are used

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- analyse packaging system components, including materials used and interaction with product, costs, processes, legal and customer requirements and environmental and handling implications
- analyse and confirm safety aspects of processes and equipment
- analyse non-conformances and packaging problems and determine probable cause
- propose improvements to the packaging system.

Context of and specific resources for

Assessment must occur in a real or simulated workplace

EVIDENCE GUIDE	
assessment	where the assessee has access to: • packaging specifications • product, packaging components and consumables • packaging process equipment • relevant standard operating procedures (SOPs) • communication systems • workplace information recording systems, requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Product packaging and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of occupational health and safety (OHS) and environmental impact
Packaging processes and technologies	Packaging processes and technologies include: • active packaging materials • vacuum packing • gas flushing or sparging

RANGE STATEMENT	
	MAP
Out-of-specification results	Follow-up action in response to out-of-specification results occurs in consultation with the relevant quality/technical expert responsible for packaging specifications

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4009A Identify the physical and chemical properties of materials, food and related products

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit covers the skills and knowledge required to identify the physical and chemical properties of materials, food and related products. It requires application of this knowledge to a production environment.

Application of the Unit

Application of the unit	This unit has application in the food processing industry where knowledge of physical and chemical properties of materials, food and related products is used to inform work in product development, production, testing, communication and problem solving.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Apply understanding of common physical phenomena in the food industry	1.1. An understanding of common physical phenomena is applied to explain relevant changes that occur to ingredients and product through the production process 1.2. Information on the changes that occur is communicated to others in appropriate formats
2. Apply an understanding of the physical states of matter	2.1. The three states of matter and the atomic changes that occur at each phase are identified 2.2. The behaviour of each type of matter and its relationship to the production process is described 2.3. The relationship between pressure and temperature in phase transition is identified
3. Apply an understanding of common food science principles to a production process	3.1. The significance of pH for processing, food safety and cleaning applications is identified 3.2. The reactions and properties of carbohydrates, proteins and fats can be tracked through a given process 3.3. The properties of common emulsions, suspensions and solutions can be described 3.4. Common chemical reactions that occur, factors required to cause a reaction and the effect of reactions can be identified 3.5. Safe work procedures for processes requiring

ELEMENT	PERFORMANCE CRITERIA
	handling of chemicals and/or involving chemical reactions are reviewed and/or established
4. Communicate and interpret technical information	4.1. Appropriate technical terms are used to communicate information on properties of food and materials commonly used in the food industry 4.2. Test results and reporting formats to communicate information on composition, properties and reactions are interpreted and applied

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify physical characteristics or phenomena that occur through processing, including the following common physical phenomena, and any additional phenomena appropriate to the production process:
 - shear and strain
 - friction
 - surface tension
 - pressure
 - crystallisation
 - total solids
 - heat and temperature
 - relative humidity
 - work/energy input
 - viscosity
 - particle size
 - melting points, boiling points, freezing points
 - dew/condensation point
 - other phenomena as appropriate to product/process
- identify products and processes where these phenomena can be observed
- based on phenomena that can be observed in a production process, develop explanatory sketches or flow charts to communicate how these phenomena affect product and process

REQUIRED SKILLS AND KNOWLEDGE

- identify tests commonly used to measure these phenomena and related units of measurement
- identify molecular changes that occur in states of matter, and apply this to an understanding of common applications, such as refrigerant or freeze drying
- for transition phases that apply in a given production process, identify the role of temperature and pressure in the transition process
- identify the difference between acids and bases
- classify commonly used materials, ingredients and indicators according to pH
- identify the difference between a strong acid and a concentrated acid and related units of measurement used to describe these acids
- identify typical strengths and concentration levels required for acids and bases commonly used in a production process (e.g. cleaning agents)
- for cleaning agents, identify compatibility with equipment surface materials
- identify the significance of pH for processing, food safety and cleaning applications
- identify the basic molecular structures of carbohydrates, proteins and fats
- identify the processing stages designed to affect the structure of these compounds (e.g. hydrogenation or denaturing proteins in cooking processes of oil)
- distinguish the difference between solutions, suspensions and colloidal systems. Colloidal systems include:
 - emulsions (oil in water/water in oil)
 - sols (solid-liquid/solid-solid)
 - gels
 - foams (gas-liquid/gas-solid)
- identify typical applications of solutions, suspensions and colloidal systems in food processing
- distinguish between dispersed particles and the dispersion medium in colloids
- identify factors that affect stability of colloidal systems, including the stages in a production process that can cause a change in the structure of a colloid
- identify common chemical reactions that occur in food processing, including both spontaneous and controlled reactions (reactions to be covered include oxidation, enzymic, Maillard and acid-based reactions, and other reactions relevant to a given product type and production process)
- identify the role of enzymes in generating biological reactions (e.g. amylase in bread)
- identify safety hazards and control methods required when handling chemicals and working with processes that involve chemical reactions
- review and/or develop workplace procedures to include advice on hazards and related instructions on control methods, including advice on action required in the event of an incident such as a chemical spill or an emergency
- read and interpret technical information to describe food properties and/or reactions, including recognition and application of appropriate units of

REQUIRED SKILLS AND KNOWLEDGE

measurement and terms

- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

knowledge of:

- physical characteristics or phenomena that occur through processing and products and processes where these phenomena can be observed
- tests commonly used to measure these phenomena and related units of measurement
- molecular changes that occur in states of matter
- transition phases that apply in a given production process
- role of temperature and pressure in the transition process
- differences between a strong acid and a concentrated acid and related units of measurement
- classifications of commonly used materials, ingredients and indicators according to pH
- typical strengths and concentration levels required for acids and bases commonly used in a production process
- basic molecular structures of carbohydrates, proteins and fats
- difference between solutions, suspensions and colloidal systems
- typical applications of solutions, suspensions and colloidal systems in food processing
- factors that affect stability of colloidal systems
- common chemical reactions that occur in food processing
- role of enzymes in generating biological reactions
- safety hazards and control methods
- technical information resources

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that

EVIDENCE GUIDE	
	recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of ability to: • identify physical and chemical characteristics of food materials and the impacts of production processes on these characteristics • identify common tests and measures to assess food materials • identify the characteristics of acids and bases and their application in food processing • identify the basic molecular structures of carbohydrates, proteins and fats • distinguish the difference between solutions, suspensions and colloidal systems • identify hazards and control methods in managing hazardous materials • communicate technical information using correct technical terms, flow charts and sketches.
Context of and specific resources for assessment	Assessment must occur in a real or simulated workplace where the assessee has access to: • production process and related equipment, manufacturers' advice and operating procedures • tests used to report relevant product/process information and recorded results.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Handling and processing of product and materials

Handling and processing of product and materials is consistent with company standards and requirements, legislative requirements, codes, industrial awards and agreements

Identification of molecular structure

Identification of molecular structure can be supported by others and does not necessarily involve use of microscopes in a laboratory

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4010A Manage water treatment processes

Modification History

November 2011: update to imported prerequisite, minor typographical error corrected.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to treat water for use in production stages, such as washing and cooling and to treat waste water.

Application of the Unit

Application of the unit	This unit is designed to provide an overview of water treatment methods and responsibilities across a food production site. It is not designed to meet the competency requirements of the person who specifies water quality standards and/or treatment methods.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	MSAENV272B	Participate in environmentally sustainable work practices

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Manage water treatment processes	1.1. Uses of water within the plant and the related quality requirement for each use are identified 1.2. Appropriate treatment methods are in place to meet treatment requirements 1.3. Environmental considerations for water treatment are identified and treatment options selected or applied to minimise environmental impact 1.4. Procedures for treating water are developed and/or reviewed
2. Manage waste water treatment and disposal	2.1. Sources and characteristics of waste water generated across food processing operations are identified 2.2. Methods for treating and recycling water are identified 2.3. Appropriate treatment methods are in place to meet treatment requirements 2.4. Legal requirements for water discharge are identified 2.5. Factors affecting the cost of water discharge are identified and monitored 2.6. Conditions that could result in non-compliance and the related control methods in place to prevent this from occurring are established 2.7. Procedures for treatment of waste water are developed and/or reviewed to ensure compliance with

ELEMENT	PERFORMANCE CRITERIA
	trade waste standards and minimal impact to the environment 2.8. Opportunities to reduce the volume of trade waste and improve treatment methods are identified, investigated and implemented within level of responsibility

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- map the uses of water in production across the production site, such as water used in cooling applications, and washing/flushing
- identify treatment requirements and methods for water used in production, such as addition of sanitising agents (e.g. chlorine and anti-rust agents)
- identify causes of risks associated with Legionella and related control measures
- describe the meaning of terms and concepts used to describe water quality, such as:
 - potable
 - total residual chlorine
 - free residual chlorine
 - available chlorine
- identify acceptable limits for water going to storm water (pH range)
- identify the legal, social and environmental consequences of releasing water to the environment that does not meet water quality standards
- identify characteristics that are monitored in waste water and how these affect the cost of trade waste disposal (this is set out in agreements with the water supplier and typically includes volume, BOD, suspended solids, and nitrogen - some types of heavy metals may also be monitored although this may not directly affect cost of disposal)
- identify equipment and methods used to monitor waste water characteristics, including meters used to measure volume and a sampling and testing regime to check water quality
- describe principles of common methods used to treat trade waste and identify typical applications, including both primary and secondary treatment stages
- identify conditions that could result in failure to comply with legal requirements for storm water and related control methods (e.g. spill control consequences and

REQUIRED SKILLS AND KNOWLEDGE

control methods)

- identify conditions that could result in high costs of trade waste disposal and related control methods, such as conditions or activities that place additional load on treatment processes (e.g. use of strong cleaning chemicals and related control measures)
- develop and/or review procedures to describe procedures to minimise costs of trade waste disposal, including good housekeeping practices, such as collection of solids and materials rather than hosing them down drains
- identify the rights of relevant authorities to enter the site and conduct independent sample collection and test procedures
- Identify appropriate communication and consultation systems to support continuous improvement of resource efficiency and waste management
- identify trends in environmental management and social expectations of companies and assess the company environmental policy and related procedures in light of these trends
- map the drainage points across a production site, including identifying drains that go to bunded areas, trade waste and storm water
- map the waste water generated at each stage of the food processing operation (for each stream generated, identify the characteristics of waste water and related treatment requirements)
- carry out an assessment on water use within a given process
- identify the quantities and applications of water, the treatment stages, if any, points where water could be more effectively conserved, such as running hoses, steam leaks, and waste water generated by the process
- identify the treatment methods currently in place and consider opportunities to improve resource utilisation through conservation of water, changing materials and processing methods and/or more effective treating and/or recycling of waste water
- based on investigations, develop improvement proposals (this may be undertaken with input from relevant technical specialists)
- establish and/or utilise consultative arrangements to canvass input on efficient water use and trade waste treatment methods
- communicate information on changes to workplace systems and procedures to support improvements
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

Knowledge of:

- uses of water in production
- treatment requirements and methods for water used in production
- legal, social and environmental consequences of releasing water to the environment

REQUIRED SKILLS AND KNOWLEDGE

- causes of risks associated with Legionella and related control measures
- acceptable limits for water going to storm water (pH range)
- characteristics that are monitored in waste water and how these affect the cost of trade waste disposal
- rights of relevant authorities to enter the site and conduct independent sample collection and test procedures
- trends in environmental management
- characteristics of waste water and related treatment requirements
- methods for recycling water
- conditions that could result in non-compliance and the related control methods
- information resources

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify and assess water usage and disposal processes in the production site
- identify environmental impacts of water use, treatment and disposal
- identify risks associated with water quality
- identify treatment requirements and methods for water used in production
- identify costs associated with use, treatment and disposal
- identify and assess opportunities for improving water efficiencies.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

EVIDENCE GUIDE	
	• company environmental policy and related procedures • site plans, including relevant advice on drainage system • advice on environmental hazards and control procedures relevant to the production facility • incident and emergency response procedures and equipment • workplace information recording systems, requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Water treatment and related work processes	Water treatment and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of occupational health and safety (OHS) and environmental impact
Procedures for waste water treatment	Procedures for waste water treatment include: • safety information and procedures to respond to non-compliance and emergency situations

RANGE STATEMENT	
Out-of-specification results	Follow up action in response to out-of-specification results occurs in consultation with the relevant quality/technical expert responsible for packaging specifications
Primary treatment stages	Primary treatment stages include but are not limited to: • separation • filtration • sedimentation (settling tanks) • dissolved air floatation (DAF)
Secondary processes	Secondary processes include but are not limited to: • activated sludge • trickling filter systems

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFTEC4011A Participate in product recalls

Modification History

November 2011: Updated to include correct prerequisite.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to identify circumstances that could warrant a product recall and to initiate and/or participate in recall processes within level of authority.

Application of the Unit

Application of the unit	This unit can apply where a person has primary responsibility for initiating a product recall or where they are required to participate in the recall decision and related process as part of a team. Product recalls occur in the context of an established recall procedure.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	FDFFS3001A	Monitor the implementation of quality and food safety programs* <i>FDFFS2001A Implement the food safety program and procedures</i>

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify product recall situations	1.1. Circumstances that could result in a product recall are identified 1.2. Appropriate controls are in place to manage risks 1.3. Criteria used to initiate a product recall are identified 1.4. Legal responsibilities and requirements of a recall program are identified
2. Participate in a product recall	2.1. The components of the product recall system in the workplace are identified 2.2. Workplace systems are used to trace ingredients, materials and batch information 2.3. Product recall procedures are implemented within level of responsibility 2.4. Procedures to define roles and levels of authority in the event of a product recall are established/reviewed
3. Review processes to minimise the risk of recurrence	3.1. The cause of the product recalls are investigated 3.2. Purchasing arrangements and in-house procedures are established or reviewed to minimise the risk of recurrence 3.3. Consultative mechanisms are established and/or reviewed to support continuous improvement and communicate information on product recalls

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- identify relevant workplace information, including the company's food safety plan and vendor assurance arrangements
- identify the risks that could result in the need to initiate a product recall and the control measures in place to prevent incidents occurring
- identify legal and company requirements of the product recall system, including the provisions of food safety legislation and related company system and criteria for determining when a recall is required
- for a given range of circumstances that could result in the need for a product recall, outline appropriate responsive action within company policy and procedures
- identify and/or develop the components of the recall system to meet company and legal requirements, including information recording systems to support traceability; identification of personnel responsible for assessing information and determining appropriate action, and procedures that define roles and levels of responsibility
- identify the social, financial, environmental and legal consequences of failing to initiate a recall or for delaying the decision
- identify and/or develop procedures for the investigation of causes and review of arrangements and procedures in the event of an incident, such as reviewing responses to previous incidents to assess effectiveness and/or developing recommendations on appropriate procedures
- identify and/or develop the appropriate communication systems and channels for consulting with people affected by the recall procedure and communicating information on improvements to be implemented
- use communication skills to interpret and complete work information to support operations of work team or area
- demonstrate and support cooperative work practices within a culturally diverse workforce

Required knowledge

Knowledge of:

- circumstances that could result in a product recall
- legal responsibilities and requirements of a recall program
- components of the recall system to meet company and legal requirements
- company's food safety plan and vendor assurance arrangements

REQUIRED SKILLS AND KNOWLEDGE

- risks that could result in the need to initiate a product recall and the control measures in place to prevent incidents occurring
- social, financial and legal consequences of failing to initiate a recall or for delaying the decision
- procedures for investigating causes
- communication requirements and procedures

Evidence Guide**EVIDENCE GUIDE**

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- identify criteria and circumstances for a product recall
- identify controls designed to prevent product recall
- identify legal implications of a product recall
- identify features of the workplace product recall system and procedures
- participate in the implementation of the product recall procedures
- determine and examine the cause of product fault
- establish mechanisms to improve operations and minimise the risk of occurrence.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- company food safety program and related information relevant to product recall, such as contractual arrangements with suppliers, product specifications and process parameters, and recall procedures
- legislation relating to product recall, including

EVIDENCE GUIDE	
	relevant food safety legislation workplace information recording systems, requirements and procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Policies and procedures	Product recalls and related work processes are consistent with company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements and takes account of occupational health and safety (OHS) and environmental impact

Unit Sector(s)

Unit sector	Technical

Competency field

Competency field	

Co-requisite units

Co-requisite units		

FDFWIN1001A Identify key operations in wine production

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This unit covers the identification of the key characteristics of Australian wine production and major industry issues.

Application of the Unit

Application of the unit	This unit supports introductory training in the wine industry, for example, vocational training in high schools and induction or applications where overview knowledge of the Australian wine industry is needed (e.g. wine region tourism personnel and wine enterprise support staff). The unit is intended to be delivered in conjunction with basic wine grape growing, cellar door sales and cellar operations units and assumes that exposure to wine grape growing and winemaking operations is done under close supervision.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify major stages in winemaking	1.1 Key activities in preparation of grapes for wine production are identified 1.2 Purpose and process of crushing, pressing, fermentation, maturation, fining, filtering, bottling and packaging are explained 1.3 Sequence of operations and key equipment used are correctly identified 1.4 Basic differences between red, white, fortified and sparkling wine processing are identified 1.5 Industry terminology is used to describe wine processing activity and wine features
2. Identify wine sales and marketing strategies and processes	2.1 Standard forms of wine packaging and labelling are identified 2.2 Range and purpose of labelling information are identified 2.3 Scope and purpose of different types of cellar door operations are identified 2.4 Major wine regions and wine types and styles in Australia are identified 2.5 Key features and market expectations of wine from different regions in Australia are described 2.6 Difference between domestic and export markets and marketing strategies and requirements are identified 2.7 Standard expert and consumer wine evaluation techniques and features are identified, including shows, reviews and tasting notes

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- understand the correct sequence of wine production stages
- identify types and purpose of fermentation processes
- identify equipment used in wine processing and storage
- identify typical bottling, labelling and packaging of wine
- understand common marketing arrangements and advantages and disadvantages of each, including cellar door sales, mail order, internet marketing, and distribution through agents and wholesalers

Required knowledge

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- main stages of wine production and equipment used
- common bottling, labelling and packaging used for wine
- nature of Australian wine market, including domestic retail, and direct selling and export markets
- wine industry terminology.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: • describe major Australian wine regions, common wine styles and grape varieties and their characteristics • identify main features of domestic and export markets

EVIDENCE GUIDE	
	• identify main production operation and sequence of operations for different wine types • identify wine products and common marketing techniques used • use wine industry terminology to communicate features and information about wine production.
Context of and specific resources for assessment	Assessment may occur in a real or a simulated workplace where the assessee has access to: • personal protective clothing and equipment as required • work procedures, including advice on relevant company practices, safe work practices, food safety, quality and environmental requirements • instructions, information, specifications and schedules as required • equipment, services and corresponding information as required • products and materials as required • documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

RANGE STATEMENT	
Wine related products	Wine related products may include: • grapes or grape products, wine (all types and styles) • fortifying spirits • promotional merchandise, • wine industry supplies (e.g. bottles, stoppers and casks) and services (e.g. personnel, expertise and analysis)
Wine types and styles	Wine types and styles include: • red, white, fortified and sparkling wine and typical variations in quality and flavour caused by ageing and processing techniques
Equipment	Equipment may include: • tanks • transfer equipment • filtration equipment • crushing and pressing equipment • fermentation vessels • stills and retorts • separators • barrels • process control equipment • IT equipment • bottling and packaging equipment

Unit Sector(s)

Unit sector	Wine operations

FDFWIN1002A Identify viticulture processes

Modification History

April 2012: Minor typographical corrections.

Unit Descriptor

Unit descriptor	This unit covers the identification of the key processes involved in growing, harvesting and preparing wine grapes for wine production.

Application of the Unit

Application of the unit	This unit supports introductory training in the wine industry, for example, vocational training in high schools and induction or applications where overview knowledge of viticulture is needed. The unit assumes that exposure to wine grape growing operations is done under close supervision.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify major processes and stages of wine grape growing	1.1 Major processes in wine grape growing are identified, including grafting, planting, irrigation, fertilising, canopy management, pruning, pest and disease control, and harvesting 1.2 Sequence and timing of operations are identified 1.3 Tasks and job roles associated with processes are described 1.4 Vintage operations, including picking and transporting, are identified 1.5 Basic industry terminology is recognised and used to describe wine grape growing activity
2. Identify features of grapes	2.1 Physiology of wine grapes are identified 2.2 Key characteristics and growth phases of the grape vine are explained 2.3 Impact of soil and climate on grape growing are described 2.4 Key risks to successful grape growing are identified 2.5 Parameters for harvesting are identified
3. Identify grape types	3.1 Major wine regions and wine types and styles in Australia are identified 3.2 Differences between major grape vine varieties are identified

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills include:

Note: The following required skills should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Ability to:

- identify wine grape vine features, including major vine types and stages of growth
- identify impact of frost, drought, pests and disease (including phylloxera) on grape growing
- identify differences between healthy and diseased, or not thriving vine
- identify grapes that are ready for harvest
- use common equipment used in wine grape vine planting, nurseries, field maintenance and harvesting
- identify major wine types and styles, grape varieties used and wine regions associated with each grape variety and wine style.

Required knowledge

Note: The following required knowledge should be applied as appropriate to the equipment and processes that are used in the particular winery or workplace.

Knowledge of:

- main stages of grape vine growth
- principles of grape vine propagation
- wine grape growing techniques
- common pests and diseases of grape vines and options for control
- wine industry terminology.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the ability to:

- describe wine grape growing processes and key stages, including grafting, planting, irrigation, fertilising, canopy management, pruning and harvesting
- identify common pests, diseases and climate related threats to successful grape growing
- explain common wine styles and grape varieties and their characteristics.

Context of and specific resources for

Assessment may occur in a real or a simulated workplace

EVIDENCE GUIDE	
assessment	where the assessee has access to: - personal protective clothing and equipment as required - work procedures, including advice on relevant company practices, safe work practices, food safety, quality and environmental requirements - instructions, information, specifications and schedules as required - equipment, services and corresponding information as required - products and materials as required - documentation and recording requirements and procedures.
Method of assessment	This unit should be assessed together with other units of competency relevant to the function or work role.
Guidance information for assessment	To ensure consistency in one's performance, competence should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Grape vine types	Major grape vine types, their characteristics and uses include: - Vitis vinifera and non-vinifera varieties - native species and hybrids - difference between rootstocks and scion stock - common and alternative varieties
Annual growth stages of grape	Annual growth stages of grape vines include:

RANGE STATEMENT	
vines	• budburst • flowering • veraison • maturity
Pests and diseases	Pests and diseases may include: • vertebrate and invertebrate pests, • phylloxera • weeds • fungi • nutrient deficiency
Wine types and styles	Wine types and styles include: • red, white, fortified and sparkling wine and typical variations in quality and flavour caused by using different grape varieties and harvesting at different stages of maturity
Equipment	Equipment may include: • tractors • spreaders • irrigation pumps and lines • mechanical harvesters and pruners • IT equipment

Unit Sector(s)

Unit sector	Wine operations

FSKNUM09 Identify, measure and estimate familiar quantities for work

Modification History

Release	Comments
Release 1	This streamlined version first released with <i>FSK Foundation Skills Training Package version 1.0</i> .

Application

This unit describes the skills and knowledge required to measure familiar and predictable quantities using simple and routine measuring instruments and units.

This unit applies to individuals who need numeracy skills at Australian Core Skills Framework (ACSF) level 2 to undertake a vocational training pathway or workplace tasks.

This unit is designed for integration and contextualisation with vocational units to support achievement of vocational competency.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Numeracy

Elements and Performance Criteria

Element	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify and interpret simple mathematical information	1.1 Identify and interpret measurement information in workplace tasks and texts 1.2 Identify familiar units of measurement needed for tasks

Element	Performance Criteria
2. Apply simple measurement strategies	2.1 Estimate familiar and simple amounts 2.2 Select appropriate measuring equipment 2.3 Use simple measuring equipment graduated in familiar units to measure relevant quantities 2.4 Calculate using familiar units of measurement
3. Check and communicate results	3.1 Check measurements and results against estimates 3.2 Record or report results 3.3 Communicate results relevant to the workplace task using informal and some formal mathematical and general language

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
		Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Mapping Information

Not applicable

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=f572fe10-a855-4986-9295-3852c771f178>

Assessment Requirements for FSKNUM09 Identify, measure and estimate familiar quantities for work

Modification History

Release	Comments
Release 1	This streamlined version first released with <i>FSK Foundation Skills Training Package version 1.0</i> .

Performance Evidence

Evidence of the ability to:

- estimate and measure familiar simple amounts
- interpret measurement on simple measuring equipment
- add, subtract and multiply simple measurements
- record results using appropriate unit.

Note: Where a specific volume and/or frequency is not specified, evidence must be provided at least once.

Knowledge Evidence

Evidence of the following knowledge must be demonstrated:

- abbreviations of familiar units of measurement
- which units of measurement to use for length, mass and capacity.

Assessment Conditions

Assessment texts and tasks reflect those typically found in the workplace.

Advice and support is available if requested.

A basic calculator can be used.

Culturally appropriate processes and techniques suited to the language, literacy and numeracy capacity of individuals and the work being performed must be used.

Reasonable adjustments can be made to ensure equity in assessment for people with disabilities.

Assessors must satisfy NVR/AQTF assessor requirements, have a sound knowledge of the ACSF and have demonstrable expertise in the vocational contextualisation and assessment of the core skill - numeracy.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=f572fe10-a855-4986-9295-3852c771f178>

FSKNUM31 Apply a wide range of mathematical calculations for work

Modification History

Release	Comments
Release 1	This streamlined version first released with <i>FSK Foundation Skills Training Package version 1.0</i> .

Application

This unit describes the skills and knowledge to extract, comprehend and analyse a broad range of mathematical information and complete complex mathematical tasks. This includes using rational and relevant irrational numbers and performing calculations required in specialist areas of mathematics applicable to the workplace.

This unit applies to individuals who need numeracy skills at Australian Core Skills Framework (ACSF) level 5 to undertake a vocational training pathway or workplace tasks.

This unit is designed for integration and contextualisation with vocational units to support achievement of vocational competency.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Numeracy

Elements and Performance Criteria

Element	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Extract, comprehend and analyse mathematical information	1.1 Extract and analyse mathematical information that may be highly embedded in a broad range of workplace tasks and texts

Element	Performance Criteria
	1.2 Comprehend and use rational numbers 1.3 Comprehend and use relevant irrational numbers
2. Undertake complex mathematical calculations for workplace tasks	2.1 Manipulate and simplify mathematical expressions 2.2 Perform calculations relevant to work involving rational and irrational numbers
3. Check and communicate results	3.1 Use estimation and assessment processes to check results 3.2 Report the result using specialised mathematical language and symbols appropriate for the task

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Writing		Records steps of calculation and result, uses symbolism appropriate to task
Technology		Uses scientific calculator

Mapping Information

Not applicable

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=f572fe10-a855-4986-9295-3852c771f178>

Assessment Requirements for FSKNUM31 Apply a wide range of mathematical calculations for work

Modification History

Release	Comments
Release 1	This streamlined version first released with <i>FSK Foundation Skills Training Package version 1.0</i> .

Performance Evidence

Evidence of the ability to:

- perform a broad range of calculations using rational and irrational numbers.

Note: Where a specific volume and/or frequency is not specified, evidence must be provided at least once.

Knowledge Evidence

Evidence of the following knowledge must be demonstrated:

- irrational numbers relevant to work context.

Assessment Conditions

Assessment texts and tasks reflect those typically found in the workplace.

Individuals can access a broad range of support resources.

Culturally appropriate processes and techniques suited to the language, literacy and numeracy capacity of individuals and the work being performed must be used.

Reasonable adjustments can be made to ensure equity in assessment for people with disabilities.

Assessors must satisfy NVR/AQTF assessor requirements, have a sound knowledge of the ACSF and have demonstrable expertise in the vocational contextualisation and assessment of the core skill - numeracy.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=f572fe10-a855-4986-9295-3852c771f178>

HLTAID002 Provide basic emergency life support

Modification History

Release	Comments
Release 4	Updated: • assessor requirements statement • foundation skills lead in statement • licensing statement • modification history to reflect 2012 standards Equivalent outcome.
Release 3	Updated mapping information. Changes to assessment requirements. Equivalent outcome.
Release 2	Minor corrections to formatting to improve readability. Equivalent competency outcome.
Release 1	This version was released in <i>HLT Health Training Package release 1.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to elements and performance criteria, changes to scope of unit. Changes to evidence requirements relative to revised scope of unit.

Application

This unit describes the skills and knowledge required to recognise and respond to life-threatening emergencies in line with the Australian Resuscitation Council (ARC) Guidelines.

This unit applies to all workers who may be required to provide an emergency response in a range of situations, including community and workplace settings.

Specific licensing /regulatory requirements relating to this competency, including requirements for refresher training should be obtained from the relevant national/state/territory Work Health and Safety Regulatory Authorities.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements define the essential outcomes.

Performance criteria specify the level of performance needed to demonstrate achievement of the element.

1. Respond to an emergency situation

- 1.1 Recognise an emergency situation
- 1.2 Identify, assess and minimise immediate hazards to health and safety of self and others
- 1.3 Assess the casualty and recognise the need for first aid response
- 1.4 Assess the situation and seek assistance from emergency response services

2. Apply appropriate first aid procedures

- 2.1 Perform cardiopulmonary resuscitation (CPR) in accordance with ARC guidelines
- 2.2 Provide first aid in accordance with established first aid principles
- 2.3 Display respectful behaviour towards casualty
- 2.4 Obtain consent from casualty where possible
- 2.5 Use available resources and equipment to make the casualty as comfortable as possible
- 2.6 Operate first aid equipment according to manufacturer's instructions
- 2.7 Monitor the casualty's condition and respond in accordance with first aid principles

3. Communicate details of the incident

- 3.1 Accurately convey incident details to emergency response services
- 3.2 Report details of incident to workplace supervisor as appropriate
- 3.3 Maintain confidentiality of records and information in line with statutory and/or organisational policies

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTAID002 Provide basic emergency life support

Modification History

Release	Comments
Release 4	Updated: • assessor requirements statement • foundation skills lead in statement • licensing statement • modification history to reflect 2012 standards Equivalent outcome.
Release 3	Updated mapping information. Changes to assessment requirements. Equivalent outcome.
Release 2	Minor corrections to formatting to improve readability. Equivalent competency outcome.
Release 1	This version was released in <i>HLT Health Training Package release 1.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to elements and performance criteria, changes to scope of unit. Changes to evidence requirements relative to revised scope of unit.

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role.

There must be evidence that the candidate has completed the following tasks in line with state/territory regulations, first aid codes of practice, Australian Resuscitation Council (ARC) guidelines and workplace procedures:

- Followed DRSABCD in line with ARC guidelines, including:
 - performed at least 2 minutes of uninterrupted single rescuer cardiopulmonary resuscitation (CPR) (5 cycles of both compressions and ventilations) on an adult resuscitation manikin placed on the floor

- performed at least 2 minutes of uninterrupted single rescuer CPR (5 cycles both compressions and ventilations) on an infant resuscitation manikin placed on a firm surface
- responded appropriately in the event of regurgitation or vomiting
- managed the unconscious breathing casualty
- followed single rescue procedure, including the demonstration of a rotation of operators with minimal interruptions to compressions
- followed the prompts of an Automated External Defibrillator (AED)
- Responded to at least one simulated first aid scenario contextualised to the candidate's workplace/community setting, including:
 - demonstrated safe manual handling techniques
 - provided an accurate verbal or written report of the incident
- Applied first aid procedures for the following:
 - allergic reaction
 - anaphylaxis
 - bleeding control
 - choking and airway obstruction
 - respiratory distress, including asthma
 - shock

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- State/Territory regulations, first aid codes of practice and workplace procedures including:
 - ARC Guidelines relevant to provision of CPR and first aid
 - safe work practices to minimise risks and potential hazards
 - Infection control principles and procedures, including use of standard precautions
 - requirements for currency of skill and knowledge
- legal, workplace and community considerations, including:
 - awareness of potential need for stress-management techniques and available support following an emergency situation
 - duty of care requirements
 - respectful behaviour towards a casualty
 - own skills and limitations
 - consent
 - privacy and confidentiality requirements
 - importance of debriefing
- considerations when providing basic emergency life support, including:
 - airway obstruction due to body position

- appropriate duration and cessation of CPR
- appropriate use of an AED
- chain of survival
- standard precautions
- principles and procedures for first aid management of the following scenarios:
 - allergic reaction
 - anaphylaxis
 - bleeding control
 - cardiac conditions, including chest pain
 - choking and airway obstruction
 - respiratory distress, including asthma
 - shock
 - stroke
- basic anatomy and physiology relating to:
 - considerations in provision of first aid for specified conditions
 - chest
 - how to recognise a person is not breathing normally
 - response/consciousness
 - upper airway and effect of positional change

Assessment Conditions

Skills must be demonstrated working individually in an environment that provides realistic in-depth, industry-validated scenarios and simulations to assess candidates' skills and knowledge.

Assessment resources must include:

- adult and infant resuscitation manikins in line with ARC Guidelines for the purpose of assessment of CPR procedures
- adrenaline auto-injector training device
- AED training device
- placebo bronchodilator and spacer device
- roller bandages
- triangular bandage
- workplace First Aid kit
- workplace injury, trauma and/or illness record, or other appropriate workplace incident report form
- wound dressing

Simulated assessment environments must simulate the real-life working environment where these skills and knowledge would be performed, with all the relevant equipment and resources of that working environment.

Assessor requirements

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

In addition hold current first aid certificate HLTAID003 or higher.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

HLTAID003 Provide first aid

Modification History

Release	Comments
Release 6	Updated: • assessor requirements statement • foundation skills lead in statement • licensing statement • modification history to reflect 2012 standards Equivalent outcome.
Release 5	Updated mapping information. Changes to assessment requirements. Equivalent outcome.
Release 4	Updated mapping information. Equivalent outcome.
Release 3	Updated mapping information.
Release 2	Minor corrections to formatting to improve readability. Equivalent competency outcome.
Release 1	This version was released in <i>HLT Health Training Package release 1.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to elements and performance criteria, changes to scope of unit. New evidence requirements for assessment. Removal of prerequisite unit.

Application

This unit describes the skills and knowledge required to provide a first aid response to a casualty. The unit applies to all workers who may be required to provide a first aid response in a range of situations, including community and workplace settings.

Specific licensing /regulatory requirements relating to this competency, including requirements for refresher training should be obtained from the relevant national/state/territory Work Health and Safety Regulatory Authorities.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements define the essential outcomes.

Performance criteria specify the level of performance needed to demonstrate achievement of the element.

1. Respond to an emergency situation

- 1.1 Recognise an emergency situation
- 1.2 Identify, assess and manage immediate hazards to health and safety of self and others
- 1.3 Assess the casualty and recognise the need for first aid response
- 1.4 Assess the situation and seek assistance from emergency response services

2. Apply appropriate first aid procedures

- 2.1 Perform cardiopulmonary resuscitation (CPR) in accordance with Australian Resuscitation Council (ARC) guidelines
- 2.2 Provide first aid in accordance with established first aid principles
- 2.3 Display respectful behaviour towards casualty
- 2.4 Obtain consent from casualty where possible
- 2.5 Use available resources and equipment to make the casualty as comfortable as possible
- 2.6 Operate first aid equipment according to manufacturer's instructions
- 2.7 Monitor the casualty's condition and respond in accordance with first aid principles

3. Communicate details of the incident

- 3.1 Accurately convey incident details to emergency response services
- 3.2 Report details of incident to workplace supervisor as appropriate
- 3.3 Maintain confidentiality of records and information in line with statutory and/or organisational policies

ELEMENT**PERFORMANCE CRITERIA**

Elements define the essential outcomes.

Performance criteria specify the level of performance needed to demonstrate achievement of the element.

4. Evaluate the incident and own performance

4.1 Recognise the possible psychological impacts on self and other rescuers involved in critical incidents

4.2 Participate in debriefing to address individual needs

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTAID003 Provide first aid

Modification History

Release	Comments
Release 6	Updated: • assessor requirements statement • foundation skills lead in statement • licensing statement • modification history to reflect 2012 standards Equivalent outcome.
Release 5	Updated mapping information. Changes to assessment requirements. Equivalent outcome.
Release 4	Updated mapping information. Equivalent outcome.
Release 3	Updated mapping information.
Release 2	Minor corrections to formatting to improve readability. Equivalent competency outcome.
Release 1	This version was released in <i>HLT Health Training Package release 1.0</i> and meets the requirements of the 2012 Standards for Training Packages. Significant changes to elements and performance criteria, changes to scope of unit. New evidence requirements for assessment. Removal of prerequisite unit.

Performance Evidence

e candidate must show evidence of the ability to complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the job role.

There must be evidence that the candidate has completed the following tasks in line with state/territory regulations, first aid codes of practice, Australian Resuscitation Council (ARC) guidelines and workplace procedures:

- Followed DRSABCD in line with ARC guidelines, including:

- performed at least 2 minutes of uninterrupted single rescuer cardiopulmonary resuscitation (CPR) (5 cycles of both compressions and ventilations) on an adult resuscitation manikin placed on the floor
- performed at least 2 minutes of uninterrupted single rescuer CPR (5 cycles both compressions and ventilations) on an infant resuscitation manikin placed on a firm surface
- responded appropriately in the event of regurgitation or vomiting
- managed the unconscious breathing casualty
- followed single rescue procedure, including the demonstration of a rotation of operators with minimal interruptions to compressions
- followed the prompts of an Automated External Defibrillator (AED)
- Responded to at least two simulated first aid scenarios contextualised to the candidate's workplace/community setting, including:
 - conducted a visual and verbal assessment of the casualty
 - demonstrated safe manual handling techniques
 - post-incident debrief and evaluation
 - provided an accurate verbal or written report of the incident
- Applied first aid procedures for the following:
 - allergic reaction
 - anaphylaxis
 - bleeding control
 - choking and airway obstruction
 - envenomation, using pressure immobilisation
 - fractures, sprains and strains, using arm slings, roller bandages or other appropriate immobilisation techniques
 - respiratory distress, including asthma
 - shock

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge required to effectively complete tasks outlined in elements and performance criteria of this unit, manage tasks and manage contingencies in the context of the work role. This includes knowledge of:

- State/Territory regulations, first aid codes of practice and workplace procedures including:
 - ARC Guidelines relevant to provision of CPR and first aid
 - safe work practices to minimise risks and potential hazards
 - infection control principles and procedures, including use of standard precautions
 - requirements for currency of skill and knowledge
- legal, workplace and community considerations including:
 - awareness of potential need for stress-management techniques and available support following an emergency situation
 - duty of care requirements

- respectful behaviour towards a casualty
- own skills and limitations
- consent
- privacy and confidentiality requirements
- importance of debriefing
- considerations when providing first aid including:
 - airway obstruction due to body position
 - appropriate duration and cessation of CPR
 - appropriate use of an AED
 - chain of survival
 - standard precautions
 - how to conduct a visual and verbal assessment of the casualty
- principles and procedures for first aid management of the following scenarios:
 - abdominal injuries
 - allergic reaction
 - anaphylaxis
 - basic care of a wound
 - bleeding control
 - burns
 - cardiac conditions, including chest pain
 - choking and airway obstruction
 - crush injuries
 - diabetes
 - dislocations
 - drowning
 - envenomation
 - environmental impact, including hypothermia, hyperthermia, dehydration and heat stroke
 - eye and ear injuries
 - fractures
 - febrile convulsions
 - head, neck and spinal injuries
 - minor skin injuries
 - needle stick injuries
 - poisoning and toxic substances
 - respiratory distress, including asthma
 - seizures, including epilepsy
 - shock
 - soft tissue injuries, including strains and, sprains
 - stroke

- unconsciousness
- basic anatomy and physiology relating to:
 - how to recognise a person is not breathing normally
 - chest
 - response/consciousness
 - upper airway and effect of positional change
 - considerations in provision of first aid for specified conditions

Assessment Conditions

Skills must be demonstrated working individually in an environment that provides realistic in-depth, industry-validated scenarios and simulations to assess candidates' skills and knowledge.

Assessment resources must include:

- adult and infant resuscitation manikins in line with ARC Guidelines for the purpose of assessment of CPR procedures
- adrenaline auto-injector training device
- AED training device
- placebo bronchodilator and spacer device
- roller bandages
- triangular bandages
- workplace First Aid kit
- workplace injury, trauma and/or illness record, or other appropriate workplace incident report form for written reports
- wound dressings

Simulated assessment environments must simulate the real-life working environment where these skills and knowledge would be performed, with all the relevant equipment and resources of that working environment.

Assessor requirements

Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

HLTAID010 Provide basic emergency life support

Modification History

Not applicable.

Application

This unit describes the skills and knowledge required to recognise and respond to life-threatening emergencies in line with first aid guidelines determined by the Australian Resuscitation Council (ARC) and other Australian national peak clinical bodies.

This unit applies to all persons who may be required to provide an emergency response in a range of situations, including community and workplace settings.

Specific licensing/regulatory requirements relating to this competency, including requirements for refresher training should be obtained from the relevant national/state/territory Work Health and Safety Regulatory Authorities

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Respond to an emergency situation.

- 1.1. Recognise and assess an emergency situation.
- 1.2. Ensure safety for self, bystanders and casualty.
- 1.3. Assess the casualty and recognise the need for first aid response.
- 1.4. Seek assistance from emergency services.

2. Apply appropriate first aid procedures.

- 2.1. Perform cardiopulmonary resuscitation (CPR) in accordance with the ARC guidelines.
- 2.2. Provide first aid in accordance with established first aid principles.
- 2.3. Display respectful behaviour towards casualty.
- 2.4. Obtain consent from casualty where possible.
- 2.5. Use available resources and equipment to make the casualty as comfortable as possible.
- 2.6. Operate first aid equipment according to manufacturers' instructions.
- 2.7. Monitor the casualty's condition and respond in accordance with first aid principles.

3. Communicate details of the incident.	3.1. Accurately convey incident details to emergency services.
	3.2. Report details of incident in line with appropriate workplace or site procedures.
	3.3. Maintain privacy and confidentiality of information in line with statutory or organisational policies.
4. Review the incident.	4.1. Recognise the possible psychological impacts on self and other rescuers and seek help when required.
	4.2. Contribute to a review of the first aid response as required.

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and not equivalent to HLTAID002 Provide basic emergency life support

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTAID010 Provide basic emergency life support

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the workplace or community setting.

There must be evidence that the candidate has completed the following tasks in line with State/Territory regulations, first aid codes of practice, first aid guidelines determined by the Australian Resuscitation Council (ARC) and other Australian national peak clinical bodies and workplace or site procedures:

- managed, in line with ARC guidelines, the unconscious, breathing casualty including appropriate positioning to reduce the risk of airway compromise
- managed, in line with ARC guidelines, the unconscious, non-breathing adult, including:
 - performing at least 2 minutes of uninterrupted single rescuer cardiopulmonary resuscitation (CPR) (5 cycles of both compressions and ventilations) on an adult resuscitation manikin placed on the floor
 - following the prompts of an automated external defibrillator (AED) to deliver at least one shock
 - demonstrating a rotation of single rescuer operators with minimal interruptions to compressions
 - responding appropriately in the event of regurgitation or vomiting
- managed, in line with ARC guidelines, the unconscious, non-breathing infant, including:
 - performing at least 2 minutes of uninterrupted single rescuer CPR (5 cycles both compressions and ventilations) on an infant resuscitation manikin placed on a firm surface
- managed casualties, with the following:
 - anaphylaxis
 - asthma
 - non-life-threatening bleeding
 - choking
 - shock
- responded to at least one simulated first aid incident contextualised to the candidate's workplace or community setting, where the candidate has no knowledge of the casualty's condition prior to starting treatment, including:
 - identifying the casualty's illness or injury through history, signs and symptoms
 - using personal protective equipment (PPE)

- providing appropriate first aid treatment
- conveying incident details to emergency services or advising casualty on any required post incident action
- providing an accurate verbal report of the incident
- reviewing the incident.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

guidelines and procedures including:

- ARC guidelines relevant to the provision of first aid
- first aid guidelines from Australian national peak clinical bodies
- potential incident hazards and risk minimisation processes when providing first aid
- infection control procedures, including use of standard precautions and resuscitation barrier devices
- requirements for currency of skill and knowledge
- first aid codes of practice
- appropriate workplace or site procedures relevant to the provision of first aid
- contents of first aid kits
- legal, workplace and community considerations, including:
 - duty of care requirements
 - own skills and limitations
 - consent and how it relates to the conscious and unconscious casualty
 - privacy and confidentiality requirements
 - awareness of potential need for stress management techniques and available support for rescuers
- considerations when providing CPR, including:
 - upper airway and effect of positional change
 - appropriate duration and cessation of CPR
 - appropriate use of an AED
 - safety and maintenance procedures for an AED
 - chain of survival
 - how to access emergency services
- techniques for providing CPR to adults, children and infants including:
 - how to recognise that a casualty is unconscious and not breathing normally
 - rate, ratio and depth of compressions and ventilations
 - correct hand positioning for compressions
 - basic anatomy, physiology and the differences between adults, children and infants relating to CPR
- Signs, symptoms and management of the following conditions or injuries:

- allergic reaction
- anaphylaxis
- asthma
- non-life-threatening and life-threatening bleeding
- cardiac conditions, including chest pain
- choking
- shock
- stroke.

Assessment Conditions

Each candidate to demonstrate skills in an environment that provides realistic in-depth, scenarios and simulations to assess candidates' skills and knowledge.

Due to the nature of this type of training, it is acceptable for the performance evidence to be collected in a simulated environment.

Compression and ventilation skills must be demonstrated on resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures.

Assessment must ensure access to:

- adult and infant resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures
- workplace first aid kit
- adrenaline auto-injector training device
- AED training devices
- placebo bronchodilator and spacer device
- different types of wound dressings and bandages
- blankets and items to treat for shock
- personal protective equipment (PPE).

Simulated assessment environments must simulate real-life situations where these skills and knowledge would be performed, with all the relevant equipment and resources of that workplace or community environment.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors and must hold this unit or demonstrate equivalent skills and knowledge to that contained within this unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

HLTAID011 Provide First Aid

Modification History

Not applicable.

Application

This unit describes the skills and knowledge required to provide a first aid response to a casualty in line with first aid guidelines determined by the Australian Resuscitation Council (ARC) and other Australian national peak clinical bodies.

The unit applies to all persons who may be required to provide a first aid response in a range of situations, including community and workplace settings.

Specific licensing/regulatory requirements relating to this competency, including requirements for refresher training should be obtained from the relevant national/state/territory Work Health and Safety Regulatory Authorities.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Respond to an emergency situation.

- 1.1. Recognise and assess an emergency situation.
- 1.2. Ensure safety for self, bystanders and casualty.
- 1.3. Assess the casualty and recognise the need for first aid response.
- 1.4. Seek assistance from emergency services.

2. Apply appropriate first aid procedures.

- 2.1. Perform cardiopulmonary resuscitation (CPR) in accordance ARC guidelines.
- 2.2. Provide first aid in accordance with established first aid principles.
- 2.3. Display respectful behaviour towards casualty.
- 2.4. Obtain consent from casualty where possible.
- 2.5. Use available resources and equipment to make the casualty as comfortable as possible.
- 2.6. Operate first aid equipment according to manufacturers' instructions.
- 2.7. Monitor the casualty's condition and respond in accordance with first aid principles.

3. Communicate details of the incident.	3.1. Accurately convey incident details to emergency services.
	3.2. Report details of incident in line with appropriate workplace or site procedures.
	3.3. Complete applicable workplace or site documentation, including incident report form.
	3.4. Maintain privacy and confidentiality of information in line with statutory or organisational policies.
4. Review the incident.	4.1. Recognise the possible psychological impacts on self and other rescuers and seek help when required.
	4.2. Contribute to a review of the first aid response as required.

Foundation Skills

The Foundation Skills describe those required skills (language, literacy, numeracy and employment skills) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and not equivalent to HLTAID003 Provide first aid

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

Assessment Requirements for HLTAID011 Provide First Aid

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the workplace or community setting.

There must be evidence that the candidate has completed the following tasks in line with State/Territory regulations, first aid codes of practice, first aid guidelines determined by the Australian Resuscitation Council (ARC) and other Australian national peak clinical bodies and workplace or site procedures:

- managed, in line with ARC guidelines, the unconscious, breathing casualty including appropriate positioning to reduce the risk of airway compromise
- managed, in line with ARC guidelines, the unconscious, non-breathing adult, including:
 - performing at least 2 minutes of uninterrupted single rescuer cardiopulmonary resuscitation (CPR) (5 cycles of both compressions and ventilations) on an adult resuscitation manikin placed on the floor
 - following the prompts of an automated external defibrillator (AED) to deliver at least one shock
 - demonstrating a rotation of single rescuer operators with minimal interruptions to compressions
 - responding appropriately in the event of regurgitation or vomiting
- managed, in line with ARC guidelines, the unconscious, non-breathing infant, including:
 - performing at least 2 minutes of uninterrupted single rescuer CPR (5 cycles both compressions and ventilations) on an infant resuscitation manikin placed on a firm surface
- managed casualties, with the following:
 - anaphylaxis
 - asthma
 - non-life-threatening bleeding
 - choking
 - envenomation, using pressure immobilisation
 - fractures, dislocations, sprains and strains, using appropriate immobilisation techniques
 - minor wound cleaning and dressing
 - nosebleed
 - shock

- responded to at least one simulated first aid incident contextualised to the candidate's workplace or community setting, where the candidate has no knowledge of the casualty's condition prior to starting treatment, including:
 - identifying the casualty's illness or injury through history, signs and symptoms
 - using personal protective equipment (PPE) as required
 - providing appropriate first aid treatment
 - conveying incident details to emergency services or advising casualty on any required post incident action
 - providing an accurate verbal and written report of the incident
 - reviewing the incident.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- guidelines and procedures including:
 - ARC guidelines relevant to the provision of first aid
 - first aid guidelines from Australian national peak clinical bodies
 - potential incident hazards and risk minimisation processes when providing first aid
 - infection control procedures, including use of standard precautions and resuscitation barrier devices
 - requirements for currency of skill and knowledge
 - first aid codes of practice
 - appropriate workplace or site procedures relevant to the provision of first aid
 - contents of first aid kits
- legal, workplace and community considerations including:
 - duty of care requirements
 - own skills and limitations
 - consent and how it relates to the conscious and unconscious casualty
 - privacy and confidentiality requirements
 - awareness of potential need for stress management techniques and available support for rescuers
- considerations when providing CPR, including:
 - upper airway and effect of positional change
 - appropriate duration and cessation of CPR
 - appropriate use of an AED
 - safety and maintenance procedures for an AED
 - chain of survival
 - how to access emergency services
- techniques for providing CPR to adults, children and infants including:
 - how to recognise that a casualty is unconscious and not breathing normally

- rate, ratio and depth of compressions and ventilations
- correct hand positioning for compressions
- basic anatomy, physiology and the differences between adults, children and infants relating to CPR
- signs, symptoms and management of the following conditions and injuries:
 - allergic reaction
 - anaphylaxis
 - asthma
 - non-life-threatening and life-threatening bleeding
 - burns
 - cardiac conditions, including chest pain
 - choking
 - diabetes
 - drowning
 - envenomation - all current treatments
 - eye injuries
 - fractures, dislocations, strains and sprains
 - head, neck and spinal injuries
 - hypothermia
 - hyperthermia
 - minor wounds
 - nose-bleed
 - poisoning
 - seizures
 - shock
 - sharps injuries
 - stroke.

Assessment Conditions

Each candidate to demonstrate skills in an environment that provides realistic in-depth, scenarios and simulations to assess candidates' skills and knowledge.

Due to the nature of this type of training, it is acceptable for the performance evidence to be collected in a simulated environment.

Compression and ventilation skills must be demonstrated on resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures.

Assessment must ensure access to:

- adult and infant resuscitation manikins following ARC guidelines for the purpose of assessment of CPR procedures
- adrenaline auto-injector training device

- AED training devices
- workplace first aid kit
- placebo bronchodilator and spacer device
- different types of wound dressings and bandages
- blankets and items to treat for shock
- personal protective equipment (PPE)
- workplace injury, trauma or illness record, or other applicable workplace or site incident report form.

Simulated assessment environments must simulate real-life situations where these skills and knowledge would be performed, with all the relevant equipment and resources of that workplace or community environment.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors and must hold this unit or demonstrate equivalent skills and knowledge to that contained within this unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ced1390f-48d9-4ab0-bd50-b015e5485705>

MEM09002B Interpret technical drawing

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers interpreting technical drawing applying to any of the full range of engineering disciplines.

Application of the Unit

Application of the unit	Technical drawings may utilise perspective, exploded views or hidden view techniques. Drawings are provided to Australian Standard 1100 and/or Australian Standard 1102 and their equivalents from the full range of engineering disciplines. Standard symbols to Australian Standard 1100 and/or Australian Standard 1102 or equivalent are recognised in field of employment. Technical drawings may include symbol glossaries. Where any drawing, sketch, chart, diagram is only used as the technique for communication, then this unit does not apply: see Unit MEM12023A (perform engineering measurements) or Unit MEM16006A (Organise and communicate information). Band: A Unit Weight: 4

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Select correct technical drawing	1.1. Drawing is checked and validated against job requirements or equipment. 1.2. Drawing version is checked and validated.
2. Interpret technical drawing	2.1. Components, assemblies or objects are recognised as required. 2.2. Dimensions are identified as appropriate to field of employment. 2.3. Instructions are identified and followed as required. 2.4. Material requirements are identified as required. 2.5. Symbols are recognised in the drawing as appropriate.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- checking the drawing against job requirements/related equipment in accordance with standard operating procedures
- confirming the drawing version as being current in accordance with standard operating procedures
- where appropriate, obtaining the current version of the drawing in accordance with standard operating procedures
- reading, interpreting information on the drawing, written job instructions, specifications, standard operating procedures, charts, lists and other applicable reference documents
- checking and clarifying task related information
- undertaking numerical operations, geometry and calculations/formulae within the scope of this unit

Required knowledge

Look for evidence that confirms knowledge of:

- application of AS1100.101 in accordance with standard operating procedures
- relationship between the views contained in the drawing
- objects represented in the drawing
- units of measurement used in the preparation of the drawing
- dimensions of the key features of the objects depicted in the drawing
- understanding of the instructions contained in the drawing
- the actions to be undertaken in response to those instructions
- the materials from which the object(s) are made
- any symbols used in the drawing as described in range statement
- hazard and control measures associated with interpreting technical drawings, including housekeeping
- safe work practices and procedures

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	A person who demonstrates competency in this unit must be able to interpret technical drawings as described.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
Context of and specific resources for assessment	This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with interpreting technical drawings or other units requiring the exercise of the skills and knowledge covered by this unit.
Method of assessment	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning should not require language, literacy and numeracy skills beyond those required in this unit. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
Guidance information for assessment	

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Interpret technical drawing

AS1100.101 is an extensive work and the candidate is not required to have complete familiarity with all its contents, the application of AS1100 would usually be in line with standard operating procedures; interpretation may require guidance particularly in respect to any geometric tolerancing

Unit Sector(s)

Unit sector

Co-requisite units

Co-requisite units

Competency field

Competency field	Drawing, drafting and design

MEM13003B Work safely with industrial chemicals and materials

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers using personal protective equipment (PPEs), identifying the particular hazards and emergency procedures, and observing safe working practices in that environment.

Application of the Unit

Application of the unit	This unit may be applied in a workplace in which materials and chemicals which are subject to codes and regulations are stored and used, for example, chemicals, solvents, dangerous materials, acids, noxious waste products etc. Evidence of competency is to encompass the satisfactory application of current State/Territory OHS legislation, standards and codes of practice, and the hierarchy of hazard control measures with elimination, substitution, isolation and engineering control measures being selected before safe work practices and PPEs. This unit describes the competencies which are beyond those safety requirements normally applied in the workplace as described in Unit MEM13014A (Apply principles of occupational health and safety in the work environment) or specifically described in individual units such as welding. Band: A Unit Weight: 2

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Use personal protective equipment	1.1. Correct and appropriate safety clothing including personal protective equipment is selected and used correctly based on information in relevant material safety data sheet (MSDS).
2. Identify emergency procedures	2.1. Emergency procedures and plan relevant to the particular work environment are documented, understood and demonstrated as laid down in approved safety instructions.

ELEMENT	PERFORMANCE CRITERIA
3. Observe safe working practices	3.1. Hazardous areas and materials are identified and special handling procedures are identified and understood. 3.2. Permits to work (if necessary) are obtained. 3.3. All equipment and hazardous materials are used in accordance with relevant OHS legislation, manufacturers' instructions and standard operating procedures. 3.4. All site-specific safety policies, safety signs, symbols and labels are correctly identified and understood. 3.5. Material safety data sheets are understood and applied. 3.6. Safe manual handling procedures (including equipment) are used. 3.7. Decanted chemicals and storage is to State/Territory dangerous goods and OHS legislation and requirements. 3.8. Housekeeping duties are performed according to standard operating procedures to maintain a safe working environment.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- undertaking risk assessment
- communicating with others
- performing proper manual handling techniques
- interpreting safety signage, labelling and placarding

Required knowledge

Look for evidence that confirms knowledge of:

- dangerous goods classification and labelling/placarding
- testing, use and maintenance of PPE

REQUIRED SKILLS AND KNOWLEDGE

- inherent hazardous properties of the chemicals to be used
- interpretation of the relevant MSDS
- basic fire fighting procedures
- site-specific emergency plan procedures
- chemical spill confinement procedures
- dangerous occurrence (near miss) reporting procedures
- hierarchy of control

Evidence Guide**EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to work safely and efficiently with various chemicals.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with working safely with industrial chemicals and materials or other units requiring the exercise of the skills and knowledge covered by this unit.

EVIDENCE GUIDE**Method of assessment**

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

Guidance information for assessment**Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Personal protective equipment

Personal protective may include appropriate:

- goggles/face shields
- respirators
- air supplied or self-contained helmets
- safety boots, gloves and appropriate clothes/garments

Safe working practices

- Environment is inspected
- Hazards (and chemical reactive hazards) are assessed and controlled using hierarchy of hazard control
- Properly maintained PPE is available
- Emergency management plan is documented/understood

RANGE STATEMENT	
	Work to be undertaken in safe 'thermal' environments and all possible ignition sources are to be identified and controlled
Storage	All storage containers (minor quantities and in consumer packages) are suitable for chemical exposure and are properly labelled and/or placarded. Chemical manifests are updated at completion of work activity
State or Territory legislative requirements	Appropriate OHS, dangerous goods acts and regulations, Australian standards, Australian Code for the Transport of Dangerous Goods by Road and Rail (ADGC), NOHSC codes of practice

Unit Sector(s)

Unit sector	

Co-requisite units

Co-requisite units		

Competency field

Competency field	Occupational health and safety

MEM15001B Perform basic statistical quality control

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers taking samples and applying a statistical process to monitor production.

Application of the Unit

Application of the unit	This unit applies to the collation and interpretation of statistical data in the context of statistical quality control, for example, tally, run or control charts. Uncontrolled variations are reported to appropriate authority. When the production and interpretation of charts and graphs not dependent on knowledge and understanding of the implications for quality are required, Unit MEM12024A (Perform computations) should be accessed. Band: A Unit Weight: 2

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Take samples	1.1. Difference between population and sample is understood and various sampling schemes are applied in accordance with standard operating procedures.
2. Apply statistical process to monitor production	2.1. Concept of variation in terms of average and spread is understood. Data is used to produce relevant statistical information. 2.2. Data is interpreted accurately and information is presented to appropriate authority according to standard operating procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.

REQUIRED SKILLS AND KNOWLEDGE

Required skills

Look for evidence that confirms skills in:

- reading, interpreting and following information on written job instructions, standard operating procedures, charts, lists, drawings and other applicable reference documents
- applying statistical process control procedures in accordance with instructions to a given production process
- obtaining data from samples including average, range and random or assignable causes
- producing tally, run or control charts from sampling data
- reporting information from sampling data
- checking and clarifying task-related information
- completing proformas and standard workplace forms

Required knowledge

Look for evidence that confirms knowledge of:

- the difference between population and sample, and the concept of variation in terms of average and range, random and assignable causes
- numerical operations and statistical calculations/formulae within the scope of this unit
- statistical process control procedures, which may include Six Sigma etc. and the sampling procedures to be followed
- the types of charts that can be produced to assist monitoring of products including run charts, tally charts, histograms, control charts
- procedures for reporting sample data information
- use and application of personal protective equipment
- safe work practices and procedures

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must

EVIDENCE GUIDE	
	be able to perform basic statistical quality control.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
Context of and specific resources for assessment	This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with performing basic statistical quality control or other units requiring the exercise of the skills and knowledge covered by this unit.
Method of assessment	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
Guidance information for assessment	

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Sampling schemes	Agreed customer plans, Acceptable Quality Level (AQL) and Average Outgoing Quality Level (AOQL) plans, Shainin, Six Sigma etc.
Relevant statistical information	Average, range and process control data and the plotting of charts such as line graphs, run charts, tally charts, histograms, control charts, random and assignable causes etc.

Unit Sector(s)

Unit sector	

Co-requisite units

Co-requisite units	

Competency field

Competency field	Quality

MEM30011A Set up basic pneumatic circuits

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers setting up and selecting components associated with single linear pneumatic systems.

Application of the Unit

Application of the unit	This unit applies to all engineering or manufacturing environments. The unit refers to simple pneumatic circuits containing single linear actuators. Work is carried out under supervision. Band: 0 Unit Weight: 0

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Determine system requirements	1.1. Instructions regarding system requirements are obtained, understood and clarified as necessary. 1.2. Circuit drawings using standard symbols are interpreted correctly.
2. Select components for simple pneumatic circuits	2.1. Suitable air system components are selected for given fluid power systems from specification charts and in accordance with safety procedures involving compressed air. 2.2. Linear actuators are selected to suit system requirements. 2.3. Control valves are selected to suit system requirements.
3. Verify component selection	3.1. Circuits are set up and operated on laboratory benches. 3.2. Operation is analysed and outcomes are verified against system requirements.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- drawing pneumatic circuits
- testing operation of pneumatic circuits
- assessing performance
- calculating circuit requirements
- documenting circuit specifications and test results
- applying fluid power principles

Required knowledge

Look for evidence that confirms knowledge of:

- fluid power:
 - definition of the term fluid power
 - differences between pneumatic and hydraulic systems
 - advantages and disadvantages of fluid power when compared to mechanical and electric power systems
 - safety procedures when working with compressed air and associated equipment
- awareness of different components including:
 - air compressors
 - receivers, interlocks
 - pipes - rigid and flexible
 - valves - types and functions
 - filters - types and functions
 - gauges and instruments - pressure and temperature gauges, liquid level gauges, thermometers, thermocouples, manometers, piezometers
 - pipe fittings - elbows/bends
 - flow measurement instruments - venturi and orifice meters
 - air motors
 - linear actuators:
 - types, selection and functions
 - methods of supporting linear actuators
 - introduction to calculations related to linear actuators
 - recognition and drawing of standard symbols
 - observation and analysis of performance of linear actuators in laboratory circuits

REQUIRED SKILLS AND KNOWLEDGE

- control valves (hydraulic and pneumatic):
- directional controls and functions
- check valves and functions
- pressure controls and functions
- flow controls and functions
- recognition and drawing of standard symbols for control valves
- drawing and analysis of typical circuits containing control valves
- observation and analysis of performance of valves in basic circuits
- circuit design and analysis (single linear actuator):
 - drawing and analysis of circuit diagrams containing basic components
 - setting up and operating circuits on pneumatic and hydraulic benches in a fluid power laboratory

Evidence Guide**EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to set up basic pneumatic circuits.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other

EVIDENCE GUIDE	
	units addressing the safety, quality, communication, materials handling, recording and reporting associated with setting up basic pneumatic circuits or other units requiring the exercise of the skills and knowledge covered by this unit.
Method of assessment	Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
Guidance information for assessment	

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Safety procedures	Following required precautions when using compressed air and when shutting down air compressors and receivers

Unit Sector(s)

Unit sector	

Co-requisite units

Co-requisite units		

Competency field

Competency field	Engineering technician

MSL922001 Record and present data

Modification History

Release 1. Supersedes and is equivalent to MSL922001A Record and present data

Application

This unit of competency covers the ability to record and store data, perform simple calculations of scientific quantities and present information in tables and graphs. The unit of competency requires personnel to solve predictable problems using clear information or known solutions. Where alternatives exist, they are limited or apparent.

This unit of competency is applicable to production operators, field assistants and laboratory assistants working in all industry sectors.

While no specific licensing or certification requirements apply to this unit at the time of publication, laboratory operations are governed by relevant legislation, regulations and/or external accreditation requirements. Local requirements should be checked.

Pre-requisite Unit

Nil

Competency Field

Data

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Record and check data	1.1 Enter data into laboratory information system or record sheets as directed 1.2 Check data to identify transcription errors or atypical entries 1.3 Rectify errors in data using workplace procedures

2	Calculate simple scientific quantities	2.1	Calculate simple scientific quantities using given formulae and data
		2.2	Ensure calculated quantities are consistent with estimations and expectations
		2.3	Report all calculated quantities with appropriate precision and units
3	Present data	3.1	Present data accurately in tables, charts and graphs using given formats and scales
		3.2	Recognise and report obvious features and trends in data
4	Store and retrieve data	4.1	File and store data in accordance with workplace procedures
		4.2	Maintain workplace confidentiality standards

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Standards, codes, procedures and/or workplace requirements

Standards, codes, procedures and/or enterprise requirements include the latest version of one or more of:

- relevant Australian and international standards, such as the international system of units (SI) and its application
- national measurement regulations and guidelines

Data

Data includes:

- worksheets, spreadsheets or databases linked to information management systems
- results of observations, tests and measurements, or surveys
- graphs, tables and control charts
- semi quantitative observations expressed on a scale e.g. 1 to 4 or + to ++++

Work health and safety (WHS) and environmental management requirements

WHS and environmental management requirements include:

- complying with WHS and environmental management requirements at all times, which may be imposed through state/territory or federal legislation. These requirements must not be compromised at any time
- applying standard precautions relating to the potentially hazardous nature of samples
- accessing and applying current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health, where relevant

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSL922001A Record and present data

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL922001 Record and present data

Modification History

Release 1. Supersedes and is equivalent to MSL922001A Record and present data

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- accurately coding, checking, recording and storing data in the required format
- performing simple calculations involving scientific quantities, with or without a calculator or computer software. The following must be performed:
 - decimals, fractions, ratios, proportions and percentages
 - unit conversion, multiples and submultiples
 - use of significant figures, rounding off, estimation and approximation
 - substitution of data in formulae
 - conversions between SI units
 - performing at least five (5) of the following calculations:
 - perimeters
 - angles
 - areas (m^2) and volumes (mL, L, m^3) of regular shapes (e.g. packaging and moulds)
 - average mass, mass %, density, specific gravity, moisture, relative and absolute humidity
 - ratios, such as mass to mass, mass to volume and volume to volume percentages
 - industry specific ratios, such as g/cm^2 , kg/m^2
 - concentration (e.g. $\text{g}/100\text{mL}$, mg/L , mg/L)
 - dilution
 - statistical values, such as mean, median, mode and standard deviation
 - average count, colonies per swab surface and cell counts (live and dead/total)
 - process variables, such as pressure, velocity and flow rates
 - % content of moisture, ash, fat, protein, alcohol, sulphur dioxide and trace metals, such as calcium or zinc
 - food properties, such as % concentration (dry), friability, bitterness, brix, free amino nitrogen, diastatic power, calorific content and yeast viability
- preparing and interpreting straightforward tables, graphs and charts of data
- recognising obvious features and trends in data, including:
 - maximum and minimum values
 - spread of data

- increasing/decreasing data, rate of change
- outliers, data beyond control limits or normal range
- presenting accurate results in the required format
- maintaining the confidentiality of data in accordance with workplace and regulatory requirements.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- concepts of metrology, including:
 - that all measurements are estimates
 - repeated measurements belong to a sample of the measured parameter
 - repeatability, precision, accuracy and significant figures
- the international system of units (SI)
- scientific and technical terminology relevant to job role
- procedures for coding, entering, storing, retrieving and communicating data
- procedures for verifying data and rectifying mistakes
- procedures for maintaining and filing records, and security of data

work health and safety (WHS) and environment requirements.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace or a simulated workplace environment, and assessment evidence must be relevant to the particular workplace context. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in either case).
- This unit may be assessed with technical units, such as:
 - MSL973001 Perform basic tests
 - MSL973002 Prepare working solutions
 - MSL973007 Perform microscopic examination
- Holistic assessment methods include:

- review of data worksheets, calculations, graphs and tables prepared by the candidate
- review of records transcribed, maintained or stored by the candidate
- feedback from supervisors and peers
- observation of the candidate as they record data and perform calculations
- questions to assess understanding of relevant procedures and trends in data.
- Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to:
 - data sets and records
 - computer and relevant software or laboratory information system
 - relevant workplace procedures.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competence and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience.
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with a laboratory about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

MSL973001 Perform basic tests

Modification History

Release 1. Supersedes and is equivalent to MSL973001A Perform basic tests

Application

This unit of competency covers the ability to prepare samples and perform tests and measurements using standard methods with access to readily available advice from supervisors.

This unit of competency is applicable to laboratory/field assistants working in all industry sectors. In general, they do not calibrate equipment and make only limited adjustments to the controls. They do not interpret or analyse results or troubleshoot equipment problems.

While no specific licensing or certification requirements apply to this unit at the time of publication, laboratory operations are governed by relevant legislation, regulations and/or external accreditation requirements. Local requirements should be checked.

Pre-requisite Unit

Nil

Competency Field

Testing

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Interpret test requirements	1.1 Review test request to identify samples to be tested, test method and equipment involved 1.2 Identify hazards and workplace controls associated with the sample, preparation methods, reagents and/or equipment

2	Prepare sample	2.1	Record sample description, compare with specification, record and report discrepancies
		2.2	Prepare sample in accordance with appropriate standard methods
3	Check equipment before use	3.1	Set up test equipment in accordance with test method
		3.2	Perform pre-use and safety checks in accordance with workplace procedures and manufacturer instructions
		3.3	Identify faulty or unsafe equipment and report to appropriate personnel
		3.4	Check calibration status of equipment and report any out-of-calibration items to appropriate personnel
4	Perform tests on samples	4.1	Identify, prepare and weigh or measure sample and standards to be tested
		4.2	Conduct tests in accordance with workplace procedures
		4.3	Record data in accordance with workplace procedures
		4.4	Perform calculations on data as required
		4.5	Identify and report out of specification or atypical results promptly to appropriate personnel
		4.6	Shut down equipment in accordance with operating procedures
5	Maintain a safe work environment	5.1	Use established safe work practices and personal protective equipment (PPE) to ensure personal safety and that of other laboratory personnel
		5.2	Minimise the generation of wastes and environmental impacts
		5.3	Ensure safe disposal of laboratory and hazardous wastes
		5.4	Clean, care for and store equipment and reagents as

required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Standards, codes, procedures and/or workplace requirements

Standards, codes, procedures and/or workplace requirements include the latest version of one or more of:

- Australian and international standards covering the requirements for the competence of testing and calibration laboratories, laboratory safety and quality management
- national work health and safety (WHS) standards and codes of practice, and national measurement regulations and guidelines
- standard methods for basic tests
- workplace documents, such as standard operating procedures (SOPs); quality and equipment manuals; calibration and maintenance schedules; material safety data sheets (MSDS) and safety procedures; material, production and product specifications; production and laboratory schedules, workplace recording and reporting procedures; and waste minimisation and safe disposal procedures

Sample preparation

Sample preparation processes include one or more of:

- sub-sampling or splitting using procedures, such as riffing, coning and quartering, manual and mechanical splitters
- diluting samples
- physical treatments, such as ashing, dissolving, filtration, sieving, centrifugation and comminution
- moulding, casting or cutting specimens

Typical basic tests carried out by laboratory/field assistants

Typical basic tests carried out by laboratory/field assistants include, but are not limited to, one or more of:

- visual/optical tests of appearance, such as colour, texture, identity, turbidity and refractive index (alcohol content and Baume/Brix)
- physical tests, such as:
 - density, specific gravity and compacted density
 - moisture content and water activity
 - particle size, particle shape and size distribution
- chemical tests, such as:
 - gravimetric, colorimetric, electrical conductivity (EC) and pH
 - specific ions using dipsticks and kits
 - nutrients (e.g. nitrates and orthophosphates) using kits
 - ashes, including sulphated ashes
- biological/environmental tests, such as:
 - pH, oxygen reduction potential (ORP), dissolved oxygen (DO) and EC
 - E coli using test kits, and surface hygiene/presence of microbes
- packaging tests, such as:
 - tearing resistance, bursting strength and impact resistance
 - permeability and/or leakage
- mechanical tests, such as:
 - Emerson class
 - concrete slump

Measurements

Measurements include, but are not limited to, one or more of:

- simple ground surveys
- meteorological parameters, such as wind direction/strength, rainfall, maximum/minimum temperature, humidity and solar radiation
- simple background radiation survey
- production/process parameters, such as temperature, flow and pressure
- gas levels in a confined space

WHS and environmental management

WHS and environmental management requirements include:

- complying with WHS and environmental management requirements at all times, which may be imposed through

requirements

state/territory or federal legislation. These requirements must not be compromised at any time

- applying standard precautions relating to the potentially hazardous nature of samples
- accessing and applying current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health, where relevant

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSL973001A Perform basic tests

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

Assessment Requirements for MSL973001 Perform basic tests

Modification History

Release 1. Supersedes and is equivalent to MSL973001A Perform basic tests

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- accurately interpreting workplace procedures and standard methods
- preparing samples using at least three (3) different processes
- performing at least five (5) basic tests or measurements using standard methods and procedures
- checking test equipment before use
- completing all tests within the required timeline without sacrificing safety, accuracy or quality
- demonstrating close attention to the accuracy and precision of measurements and the data obtained
- calculating simple quantities using appropriate equations, units, uncertainties and precision
- recording and presenting results accurately and legibly
- maintaining the security, integrity and traceability of all samples, data/results and documentation
- following procedures for working safely and minimising environmental impacts.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- concepts of metrology, including:
 - all measurements are estimates
 - measurements belong to a population of measurements of the measured parameters
 - precision, accuracy and significant figures
 - sources of error, uncertainty and repeatability
 - traceability
- international system of units (SI)
- purpose of tests performed as part of job role and principles of the standard methods/specifications used
- function of key components of the test equipment, pre-use equipment and safety checks
- sources of uncertainty in measurement and methods for control
- workplace and/or legal traceability requirements
- interpretation and recording of test result, including simple calculations

- procedures for recognising and reporting of unexpected or unusual results
- relevant hazards, work health safety (WHS) and environment requirements.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept in each case).
- This unit of competency may be assessed with:
 - MSL922001 Record and present data
- Holistic assessment methods include:
 - review of the quality of test data/results achieved by the candidate over time
 - inspection of records and workplace documentation completed by the candidate
 - observation of the candidate performing a range of basic tests
 - feedback from peers and supervisors
 - oral or written questioning to check required knowledge of basic test procedures.
- Access is required to instruments, equipment, materials, workplace documentation, procedures and specifications associated with this unit, including, but not limited to:
- a standard laboratory equipped with basic test equipment, common measuring instruments, materials, standard methods, workplace procedures, MSDS and equipment manuals.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competence and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience.
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with a laboratory about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>

MSMENV272 Participate in environmentally sustainable work practices

Modification History

Release 1. Supersedes and is equivalent to MSAENV272B Participate in environmentally sustainable work practices

Application

This unit of competency covers the skills and knowledge required to effectively find out current resource use and carry out improvements, in own work area, including those that reduce the negative environmental impacts of work practices.

This unit of competency applies to operators/team members who are required to follow procedures to work in an environmentally sustainable manner. This maximises the environmental performance of the process and the organisation, ensures regulatory compliance, and aims to minimise environmental risks and impacts.

This unit of competency applies to all sectors of the manufacturing industry and members of its value chain. It may also be applied to all sections of an organisation, including office and warehouse. This unit will need to be contextualised for the industry sector, organisation and section.

This unit of competency applies to an individual working alone or as part of a team/work group and working in liaison with other shift team members and the control room operator, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

HSE

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify current resource use and environmental issues	1.1	Identify workplace environmental and resource efficiency issues
		1.2	Identify resources used in own work role
		1.3	Find out current usage of resources
2	Comply with environmental regulations	2.1	Read and follow environmental policies and procedures to ensure compliance with federal, state/territory and local government laws, by-laws, regulations and mandated codes of practice, and codes and standards that the organisation applies voluntarily
		2.2	Ask questions and seek clarification relating to environmental work requirements
		2.3	Identify incidents, including breaches or potential breaches of environmental regulations and occurrences outside of standard procedures, and report to appropriate personnel
		2.4	Report environmental incidents using workplace forms and procedures
3	Seek opportunities to improve environmental practices and resource efficiency	3.1	Follow workplace procedures to improve environmental practices and resource efficiency
		3.2	Make suggestions for improvements to environmental workplace practices and work plans

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Environmental and resource efficiency issues

Environmental and resource efficiency issues include minimisation of environmental risks and maximisation of opportunities to improve business environmental performance and to promote more efficient

production and consumption of natural resources. They include one or more of the following:

- minimisation of waste through implementation of the waste management hierarchy
- contribution to climate change and other macro threats that can arise from materials and work processes used
- efficient and effective use of energy and other resources
- seeking alternative sources of energy
- efficient use of materials and appropriate disposal of waste
- use of controls to minimise the risk of environmental damage from hazardous substances
- efficient water use
- reducing emissions
- life cycle analysis applied to issues, such as energy supply, materials, transport and production

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAENV272B Participate in environmentally sustainable work practices

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMENV272 Participate in environmentally sustainable work practices

Modification History

Release 1. Supersedes and is equivalent to MSAENV272B Participate in environmentally sustainable work practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and must include the ability to:

- find out resources used in own job, including one or more of:
 - making simple measurements, consistent with the job
 - counting the number of items entering/leaving a work area
 - reading indicators in the work area
 - obtaining relevant information from support personnel
- follow environmental policies and identify potential breaches of environmental regulations
- suggest improvements within the limit of own authority.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- a basic understanding of:
 - sustainability
 - the contribution to climate change and other macro threats that can arise from materials and work processes used
- the environmental hazards/risks, resource use and inefficiencies associated with own workplace and job
- the relevant environmental and resource efficiency policies and procedures for own work area
- the impact of laws and regulations at a level relevant to the work context.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations

- will typically include a supervisor/third-party report focusing on consistent performance and problem recognition and solving. A supervisor /third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- will typically include the use of appropriate tools, equipment and documents
- may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMENV472 Implement and monitor environmentally sustainable work practices

Modification History

Release 1. Supersedes and is equivalent to MSAENV472B Implement and monitor environmentally sustainable work practices

Application

This unit of competency covers the skills and knowledge required to effectively analyse the workplace in relation to environmentally sustainable work practices, and to implement improvements and monitor their effectiveness.

This unit of competency applies to those who have responsibility for a specific area of work or who lead a work group or team. It addresses the knowledge, processes and techniques necessary to implement and monitor environmentally sustainable work practices, including the development of processes and tools.

It includes identifying areas for improvement, developing plans to make improvements, and implementing and monitoring improvements in environmental performance.

This unit of competency applies to all sectors of the manufacturing industry and members of its value chain. It may also be applied to all sections of an organisation, including office and warehouse. This unit will need to be appropriately contextualised as it is applied across an organisation and across different industry sectors.

This unit of competency applies to an individual working alone or as part of a team/work group and working in liaison with other shift team members and the control room operator, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

HSE

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Investigate current practices in relation to resource usage	1.1	Identify environmental regulations applying to the enterprise
		1.2	Assess procedures for assessing compliance with environmental regulations
		1.3	Collect information on environmental and resource efficiency systems and procedures and provide to the work group, as required
		1.4	Measure and record current resource usage by members of the work group
		1.5	Analyse and record current purchasing strategies
		1.6	Analyse current work processes to access information and data, and assist in identifying areas for improvement
2	Set targets for improvements	2.1	Seek input from stakeholders, key personnel and specialists
		2.2	Access external sources of information and data as required
		2.3	Evaluate alternative solutions to workplace environmental issues
		2.4	Set efficiency targets
3	Implement performance	3.1	Source and use techniques/tools to assist in achieving targets

	improvement strategies	3.2	Apply continuous improvement strategies to own work area of responsibility, and communicate ideas and possible solutions to the work group and management
		3.3	Integrate environmental and resource efficiency improvement plans for own work group with other operational activities and implement them
		3.4	Seek suggestions and ideas about environmental and resource efficiency management from stakeholders and act upon them where appropriate
		3.5	Implement costing strategies to fully value environmental assets
4	Monitor performance	4.1	Document outcomes and communicate reports on targets to key personnel and stakeholders
		4.2	Evaluate strategies and environmental performance, including breaches or potential breaches of regulations and occurrences outside of standard procedure which may lead to lower environmental performance
		4.3	Set new targets and investigate and apply new tools and strategies
		4.4	Promote successful strategies and reward participants where possible

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements
- *ISO 14001:2015 Environmental management systems*

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Unit Mapping Information

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMENV472 Implement and monitor environmentally sustainable work practices

Modification History

Release 1. Supersedes and is equivalent to MSAENV472B Implement and monitor environmentally sustainable work practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and must include the ability to:

- investigate/analyse resource usage
- evaluate improvement alternatives and set targets
- implement improvements within the limit of own authority
- monitor the performance of improvements.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- relevant environmental and resource efficiency issues, specific to industry practices, including:
 - contribution to climate change and other macro threats that can arise from materials and work processes used
 - regulated environmental issues
 - issues relevant to licencing conditions
- best practice environmental approaches relevant to own area of responsibility
- methods for measuring and calculating resource usage.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations
 - will typically include a supervisor/third-party report focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - will typically include the use of appropriate tools, equipment and documents

- may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

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MSMOPS400 Optimise process/plant area

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS400A Optimise process/plant area

Application

This unit of competency covers the skills and knowledge required to optimise the process performance of a complete process, plant area or system. It requires optimising a more significant portion of a plant than would be required for one of the PMAOPS3## series. It also requires a more strategic approach to the optimisation than the routine, day-to-day optimisation undertaken as a routine part of plant operation. The optimisation may, or may not involve capital expenditure.

It includes ensuring that the process/plant area complies with health, safety and environment (HSE) requirements, that process, plant and equipment improvement is planned and carried out, and that problems are solved to meet operational needs and ensure that production of finished goods meets customer requirements. It includes all items of equipment and unit operations which form part of the production process of a complete area.

This unit of competency requires the application of detailed operational and process knowledge, including the principles of operation of equipment, and the chemistry and/or physics and/or biology/biochemistry of changes to materials occurring during processing. It embodies a significant breadth and depth of technical knowledge and process understanding which is applied to process improvement.

This competency is typically performed by a senior operator, team leader or frontline manager.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Operations

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Analyse and evaluate current plant, equipment and processes	1.1 Compare actual process, plant and equipment performance with requirements and/or historical data/records and/or design performance 1.2 Identify abnormal or sub-optimal process, plant and equipment performance 1.3 Identify hazards associated with the plant and equipment 1.4 Collect and evaluate product, materials and/or process records to determine possible causes for sub-optimal performance 1.5 Use appropriate techniques to rank possible causes from most to least probable cause
2	Develop plan for corrective and/or optimisation action	2.1 Analyse causes to determine appropriate corrective action 2.2 Predict the impact of a change in one unit/area on other related plant units/areas 2.3 Predict the impact of a change on HSE performance 2.4 Develop measurable objectives and evaluate alternatives 2.5 Identify requirements to implement change 2.6 Consult with stakeholders regarding planned changes and impacts 2.7 Develop optimisation plan taking account of hazards identified and HSE implications and communicate to appropriate personnel 2.8 Evaluate optimisation action to determine measures of effectiveness

3	Coordinate corrective and/ or optimisation action plan	3.1	Coordinate all appropriate unit areas and operations in order to rectify problem causes in process, plant and equipment performance
		3.2	Initiate and/or implement all required corrective/optimisation actions
		3.3	Communicate corrective/optimisation outcomes to all relevant personnel
		3.4	Record and maintain log of all relevant information
4	Develop continuous improvement strategies	4.1	Identify opportunities to continuously improve performance of process/plant area
		4.2	Develop recommendations for continual improvement of process, plant and equipment effectiveness
		4.3	Consult with appropriate personnel and implement continuous improvement strategies
		4.4	Document implementation of continuous improvement strategies

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Regulatory framework** The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:
- legislative requirements, including work health and safety (WHS)

- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- equipment start-up, operation and shutdown procedures
- calibration and maintenance schedules
- quality manuals and procedures
- organisation recording and reporting procedures
- material, production and product specifications
- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Process optimisation Process optimisation requires application of detailed operational and process knowledge to address one or more of the following:

- starting material quality
- yield maximisation
- throughput maximisation
- energy efficiency
- use of utilities
- labour utilisation
- overall cost
- efficient use of equipment

- reducing downtime
- minimisation of waste and rework
- improved workplace layout and work flow

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMOPS400A Optimise process/plant area

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMOPS400 Optimise process/plant area

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS400A Optimise process/plant area

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- identify and interpret information from a range of internal and external sources
- use analytical techniques to identify cause of a complex problem
- determine corrective actions to optimise the condition of the process, plant and equipment
- plan and coordinate corrective/optimisation actions and related changes that may be required
- develop written plans
- complete documentation
- identify and control hazards by applying the hierarchy of control as part of the optimisation process
- distinguish between:
 - optimum and marginal performance of the plant
 - effective and marginal performance corrections and actions
- communicate and consult with stakeholders at all levels
- read and interpret technical information and relevant regulatory requirements
- develop and implement continuous improvement strategies.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- hazards that may arise in the job/work environment, including:
 - their possible causes
 - potential consequences
 - appropriate risk controls
- relevant technical theory of the plant area
- an in depth understanding of plant and process across the entire plant area being optimised
- process parameters and limits, including:
 - temperature
 - pressure
 - flow
 - pH

- effects of variations in process conditions and materials
- functions and principles of operation of equipment in the production process
- chemistry and/or physics and/or biology/biochemistry relevant to changes to materials during processing.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- It is desirable that this evidence comes from implemented optimisation projects. However, where the project does not receive sanction to be implemented, or is otherwise not implemented, then sufficient evidence may be able to be obtained from a detailed implementation plan and a simulated implementation.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should occur in operational workplace situations. Where this is not possible, or practical, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements

Links

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MSMOPS401 Trial new process or product

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS401A Trial new process or product

Application

This unit of competency covers the skills and knowledge required to take a lead technical role in the trialling of a new or significantly altered product or process. The new/changed product/process has been independently developed and its development is not part of this unit.

The unit of competency applies to a person in a technician role in a plant or a similar role. The technician is expected already to be a technical expert in that part of the plant/process where the trial is being conducted and be able to operate and control all equipment required for the trial. The technician is often the most technically competent member of an operational team. As such, they may not have the 'hands on' role of operating items of equipment; but they are required to have the competence to direct the operation of equipment as appropriate throughout the trial.

Typically the technician will be part of a team during the trial and will work in conjunction with a process/product development expert, such as a chemist or engineer and liaise and cooperate with other members of the team.

Trialling refers to the scale-up and other development steps required to take a new product or process from its design/laboratory trials to full commercial operation on a plant. Trialling may be done on a pilot plant where available and/or on a full scale plant.

This unit of competency does not apply to minor modifications to existing products or processes. Similarly it does not apply to a technician or operator taking part in such trials and/or who is simply following directions from a technician, chemist, engineer, supervisor or manager.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Operations

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Contribute to the selection of equipment/ process conditions	1.1	Liaise with appropriate technical experts
		1.2	Interpret properties of materials and desired product characteristics
		1.3	Interpret technical specifications/drawings of plant requirements
		1.4	Recommend equipment/ancillary equipment appropriate for the materials, products and conditions
		1.5	Recommend process conditions appropriate for the equipment, materials and product characteristics
		1.6	Recommend feed rates/order/condition appropriate to the process conditions, equipment, materials and product characteristics
		1.7	Ensure hazard identification and analysis procedures are completed, including consultation with stakeholders, and findings included in plan
		1.8	Ensure recommendations meet the identified need
2	Prepare for trials	2.1	Determine the availability of resources required, such as materials, equipment, people and skills
		2.2	Estimate time required for trial
		2.3	Liaise with relevant stakeholders
		2.4	Schedule trial at a convenient time

		2.5	Develop documentation for the trial
		2.6	Identify potential hazards and required hazard control procedures by applying the hierarchy of control
		2.7	Determine permit and other authorisation requirements and special safety and storage requirements
		2.8	Verify decisions with appropriate experts/stakeholders
		2.9	Ensure people with adequate skills are available for the trial
3	Conduct trials	3.1	Ensure hazard controls are implemented prior to commencement
		3.2	Run trials
		3.3	Maintain communication with all relevant personnel
		3.4	Closely monitor critical parameters
		3.5	Recognise actual and potential problems
		3.6	Make adjustments to process conditions as required during trial
		3.7	Sample and test product as required
		3.8	Record and report performance data
		3.9	Ensure all materials, products and waste are handled correctly
		3.10	Leave plant in a condition suitable for routine production to recommence
4	Evaluate results and identify modifications	4.1	Interpret data from trial
		4.2	Identify factors which might be related to low rates or low charge amounts
		4.3	Recommend modifications and improvements required
		4.4	Develop and check standard operating procedures (SOPs)

- 4.5 Complete documentation and report to appropriate personnel
- 4.6 Ensure all relevant staff have required skill levels for the introduction of the new process

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations to which this unit applies are subject to stringent health, safety and environment (HSE) requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- emergency procedures
- work instructions
- SOPs
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Technical experts

Technical experts include one or more of the following:

- manufacturers
- chemists
- engineering personnel
- designers
- WHS advisors
- maintenance personnel
- potential customers

Non-routine problems

Routine problems must be resolved by applying known solutions.

Non-routine problems must be resolved by applying operational knowledge to develop new solutions, either individually or in collaboration with relevant experts, to:

- determine problems needing action
- determine possible fault causes
- develop solutions to problems which do not have a known solution
- follow through items initiated until final resolution has occurred
- report problems outside area of responsibility to designated person

Non-routine problems are unexpected problems, or variations of previous problems and include one or more of the following:

- mixing is poor
- materials do not behave as expected
- process/reaction does not proceed/proceeds too slowly
- process/reaction proceeds too quickly/runs away
- yield is low
- quality is out of specification
- process is unstable
- instrumentation is not sufficiently sensitive/too sensitive

- variable catalyst activity
- surging flow/pressure

Operational knowledge includes one or more of the following:

- procedures
- training
- technical information, such as journals and engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people

Hazard analysis procedures

Hazard analysis procedures must be undertaken, however, it is not required that the candidate conducts the procedures. Hazard analysis procedures include one or more of the following:

- job safety analysis (JSA)/job hazard analysis (JHA)
- hazard and operability (HAZOP) studies
- hazard analysis (HAZAN) studies
- similar company specified procedures

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMOPS401A Trial new process or product

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMOPS401 Trial new process or product

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS401A Trial new process or product

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- analyse technical information from a range of sources
- determine recommendations for new process or product, including:
 - materials
 - equipment
 - process and process conditions
 - required variations in process variables
- plan the trials
- conduct trials
- communicate and liaise with people at a range of levels about technical matters
- write technical documentation, including specifications and procedures required for the trial
- ensure formal hazard analysis procedures are undertaken
- recognise early warning signs of equipment/processes or potential problems needing attention
- isolate the causes of problems to an item of equipment within the plant system
- identify any additional skills needs.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- organisation procedures
- relevant technical theory of the plant area
- chemistry and/or physics and/or biology/biochemistry relevant to changes to materials during processing
- effects of variations in process conditions and materials
- routine and non-routine problems that may arise, the range of possible causes and processes to develop solutions
- methods of changing rate and the advantages and disadvantages of each
- methods of controlling other process variables and the advantages and disadvantages of each.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- The trial may, or may not be a success.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should occur in operational workplace situations. Where this is not possible or practical, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

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MSMPER200 Work in accordance with an issued permit

Modification History

Release 1. Supersedes and is equivalent to MSAPMPER200C Work in accordance with an issued permit

Application

This unit of competency covers the skills and knowledge required to work in accordance with an issued permit. It aims to ensure that people working under a permit to work understand the system, know the limitations of the permit under which they are working and comply with all the requirements of the permit. The people to whom this unit applies may be called 'permit recipients' or 'permit holders' by some organisations. Some organisations call 'permits' 'clearances'.

This unit of competency applies to persons who are required to conduct work activities under the authority of an issued permit to work and within the context and requirements of that permit. This typically applies to all work done by maintenance staff and contractors and also to any other non-process work performed on the plant.

This unit of competency applies to an individual working alone or as part of a team/work group and working in liaison with other team members, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Work Control Systems

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Apply for permit	1.1	Confirm the scope and location of the work to be done
		1.2	Identify the need for a work permit for the work to be carried out
		1.3	Identify the type of work permit required
		1.4	Collate information required for the issue of the permit
		1.5	Apply for the permit following the organisation's requirements
2	Identify the scope of the permit	2.1	Check that work to be done complies with the permit type
		2.2	Check that the scope and location of work comply with the permit issued
		2.3	Identify hazards and check that the hazard controls specified on the permit are consistent with the hazard analysis
		2.4	Check that preparations specified on the permit have been completed
		2.5	Sign onto/receive the permit
3	Prepare for permitted work	3.1	Maintain safe working conditions and environment by using available isolation procedures and safety equipment
		3.2	Monitor plant conditions and hazards to ensure work under the permit remains safe
		3.3	Ensure that appropriate personal protective equipment (PPE) is selected and worn, and emergency equipment is available, as required by the permit and relevant procedures
		3.4	Inspect work area to ensure safety and compliance with permit requirements and procedures

4	Work in accordance with an issued permit	4.1	Use required hazard reduction/control measures
		4.2	Comply with requirements of the permit, including safety observer if required
		4.3	Display issued permit on work site as required
		4.4	Ensure compliance with scope, location and timeframe specified in the permit.
		4.5	Seek variation to permit/new permit if job or work environment vary from that specified in the permit
		4.6	Suspend job and make worksite safe before leaving job
		4.7	Formally seek and receive authorised extensions to the permit when required
		4.8	Give end-of-day status report to permit issuer
5	Complete permit to work	5.1	Obtain new permit or have existing permit revalidated before work is recommenced
		5.2	Check the work conducted against the issued permit to ensure that all the nominated work requirements have been satisfied
		5.3	Monitor general housekeeping to ensure that the site has been left in a clean and safe condition
		5.4	Ensure personal lock outs/tag outs/isolations are removed in accordance with procedures
		5.5	Communicate status of the work conducted and the results of the permit to relevant personnel
		5.6	Complete documentation as required and have permit signed off when job is completed

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- temporary instructions
- any similar instructions provided

Work permits

Work permits include one or more of the following:

- cold work/general permit to work
- excavation
- hot work
- vehicle entry
- minor repairs
- working at heights
- confined space entry
- other special permits where there is an appropriate sign-off as required

Information required for

Information required for the issue of the permit includes one or more of

- permit** the following:
- work description
 - tools to be used
 - process/methods of work/SOPs

Where hazardous materials are being used relevant material safety data sheets (MSDS) will also be required.

- Hazards** Hazards include one or more of the following:
- slips and trips
 - emergency equipment is unavailable
 - smoke, darkness and heat
 - heat, smoke, dust or other atmospheric hazards
 - electricity
 - gas
 - gases and liquids under pressure
 - structural hazards
 - structural collapse
 - industrial (machinery, equipment and product)
 - equipment or product mass
 - noise, rotational equipment or vibration
 - limited head spaces or overhangs
 - work where a fall by a person from one level to another is reasonably likely to cause injury
 - working in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
 - flammability and explosivity
 - hazardous products and materials
 - unauthorised personnel
 - sharp edges, protrusions or obstructions, swarf and scrap
 - spills or leaks
 - extreme weather
 - other hazards that might arise
 - unsafe conditions developing through failure to conform with the provisions of a work permit
 - hazards created by the nature or location of the work
 - hazards created by the proximity of the work to other work or normal operations

- Display issued** The permit holder must keep the issued permit with them on site. It must

permit

be displayed or ready to be shown as required by the site/job requirements, including one or more of the following:

- displayed in a mounting provided by the site
- accessible in a folder which is on the worksite
- carried in overall pockets in a manner which allows it to be readily shown on request

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMPER200C Work in accordance with an issued permit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMPER200 Work in accordance with an issued permit

Modification History

Release 1. Supersedes and is equivalent to MSAPMPER200C Work in accordance with an issued permit

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria, and demonstrate the ability to:

- identify type and scope of permit relevant to the job
- interpret and implement permit conditions
- identify changes to conditions which may lead to the permit being revoked before the job is completed
- monitor hazards and hazard controls.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- different types of permits and the work they cover, including three (3) or more of:
 - cold work/general permit to work
 - excavation
 - hot work
 - vehicle entry
 - minor repairs
 - working at heights
 - confined space entry
 - other permit types as used on site
- the impact of the regulatory framework and organisation procedures under which the permit operates upon the particular job requiring the permit
- hazards associated with tasks covered by the permit and related hazard controls
- types of tests/inspections required for the issue of work permits including one (1) or more of:
 - atmospheric, oxygen/breathability
 - temperature
 - humidity
 - combustibles, oxygen, enriched or reduced
 - electricity
 - stored pressure/energy

- flammability/explosivity
- toxicity
- electricity
- stored energy/pressure.

Assessment Conditions

- Competency must be achieved before performing this work unsupervised. Therefore this unit will typically be assessed off the job. Where assessment is undertaken on the job, appropriate supervision and safety precautions must be provided.
- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should provide evidence of the ability to perform over the range of situations which might be expected to be encountered, including typical disruptions to normal, smooth work conditions
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems
 - may use industry-based simulation particularly where safety, lack of opportunity or significant cost is an issue.
- Off-the-job assessment must sufficiently reflect realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMPER201 Monitor and control work permits

Modification History

Release 1. Supersedes and is equivalent to MSAPMPER201A Monitor and control work permits

Application

This unit of competency covers the skills and knowledge required to monitor a work situation in which the activity is conducted under a permit to work. The individual will be required to monitor the work situation for conformance to the permit and immediately intervene if the parameters of the permit are not met or work proceeds outside the boundaries set by the permit.

This role is typically carried out by the plant operator for that area or other suitably qualified person.

The role of ‘hole watcher’ and ‘fire watcher’ are covered by MSMPER202 Observe permit work

This unit of competency carries a high level of responsibility and the level and area of responsibility of the role is typically prescribed by the permit process.

This unit of competency applies to the activities and functions associated with work carried out in a hazard controlled environment.

Not all sites/plants will have all permits. Some sites will call permits by other names, e.g. clearances.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Work control systems

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes		Performance criteria describe the performance needed to demonstrate achievement of the element	
1	Identify and monitor permit conditions	1.1	Identify permit requirements
		1.2	Monitor conditions to ensure that the work being conducted conforms to the issued permit requirements
		1.3	Identify and communicate changes in the operating conditions or requirements of the permit to permit holders to ensure they are kept aware of any hazards
2	Control work permit systems	2.1	Check and verify the permit holder's knowledge of the issued permit and its requirements before allowing any work to be undertaken
		2.2	Control work activities to comply with the work permit system and safety procedures
		2.3	Undertake site inspections to ensure that the work to be undertaken is in sequence and completed in a safe and coordinated manner
		2.4	Identify hazards, and confirm with those undertaking the permitted work that control measures, as defined in the permit, are established
3	Identify and action non-compliance	3.1	Identify conditions of active permits
		3.2	Take corrective action upon incidences of non-compliance with permit conditions through the withdrawal or suspension of the issued permit
		3.3	Report and record incidents of non-compliance according to procedures

4	Confirm compliance with permit	4.1	Complete checklists in accordance with standard procedures
		4.2	Document and communicate findings to appropriate personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirement
- Dangerous Goods regulations
- Hazardous substances regulations
- Hazardous Substances Information System
- Major hazard facility requirements, if relevant
- Australian Standard AS 2865-2009 Confined spaces
- Australian Standard AS 1674 Set-2007 Safety in welding and allied processes (covers all hot work)
- Australian Standard AS 4024.1-2014 Series - Safety of machinery
- Australian Standard AS/NZ 1715:2009 Selection use and maintenance of respiratory protective equipment
- National Standard for Plant [NOHSC:1010 (1994)]
- National exposure standards for atmospheric contaminants in the

occupational environment [NOHSC:1003 (1995)]

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- permit control system
- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Work permits

Work permits include one or more of the following:

- cold work
- excavation
- vehicle entry
- minor repairs
- working at heights
- hot work
- confined space
- electrical
- increased hazard
- permits covering a single plant item or plant area, such as might be an operator's scope of responsibility
- other relevant permits

The work control (permit) system

The work permit system includes:

- types of permits
- legislative/regulatory/standards framework
- roles and responsibilities of parties under the permit system
- specifications for undertaking the work covered by a permit
- alternative ways of conducting a job

Work

Work specifications include one or more of the following:

<i>specifications</i>	• any requirements for testing of atmospheric conditions and ventilation • safety structures and control measures • communications • incident response • equipment which can and cannot be used
<i>Safety structures and control measures</i>	Safety structures and control measures include one or more of the following: • isolations • lockout/tag out • barriers and signage • emergency response • gas testing/atmosphere monitoring • standby person • other measures specified in the permit
Monitor	Monitor includes observing conditions of the workplace at a frequency appropriate to the risk and work practices, and includes one or more of the following: • supervision/monitoring of contractors and/or employees • verification of permits, licences and tests • document control • checking work activities against permit conditions, site-specific safety procedures and requirements and relevant legislation/codes • identifying non-compliances •
Tools and equipment	Tools and equipment include one or more of the following: • locks and tags • blinds/blanks • blind/blank list • gas testers and monitors • barricades • signage • communications equipment • process and equipment drawings •
Hazards	Hazards include one or more of: • process isolations incomplete

- mechanical and electrical isolations not in place
- atmospheric testing incomplete and atmosphere not safe
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment failures
- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration
- limited head spaces or overhangs
- working where a fall is reasonably likely, in restricted or confined spaces, or in environments subjected to heat, noise, dusts, smoke, darkness, vapours or other atmospheric hazards
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- other hazards that might arise

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMPER201A Monitor and control work permits

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMPER201 Monitor and control work permits

Modification History

Release 1. Supersedes and is equivalent to MSAPMPER201A Monitor and control work permits

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- identify activities requiring a permit and type of permit required
- monitor the conditions of work under the permit
- identify changes in work and site circumstances that affect permit
- communicate effectively with team/work group and other personnel to:
 - explain the requirements of the permit
 - explain and verify complex issues and requirements relevant to permit conditions
 - withdraw or cause work to cease outside permit conditions
 - explain and implement safety and incident response procedures
- identify and report any non-conformance with permit conditions
- speak clearly and unambiguously in the language of the worksite
- complete workplace forms and reports
- differentiate between acceptable and unacceptable conditions

identify hazards and apply relevant hazard controls.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- organisation procedures, including:
 - work permit systems
 - safety, emergency and hazard control
 - incident response
 - plant isolation and preparation requirements
 - relevant organisation procedures
- hazards that may arise in the job and plant, including:
 - their possible causes
 - potential consequences
 - appropriate risk controls
- functions and components of a permit system

- types of permits, what they cover, limitations and associated hazards.

Assessment Conditions

- Competency must be achieved before performing this work unsupervised. Therefore this unit will typically be assessed off the job. Where assessment is undertaken on the job appropriate supervision and safety precautions must be provided.
- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should provide evidence of the ability to perform over the range of situations which might be expected to be encountered, including typical disruptions to normal, smooth work conditions
 - must include the use of typical permits
 - may use industry-based simulation particularly where safety, lack of opportunity or significant cost is an issue.
- Off-the-job assessment must sufficiently reflect realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - demonstration of skills
 - industry-based case studies/scenarios
 - 'what ifs'.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMPER300 Issue work permits

Modification History

Release 2. Addition of information missing from the Assessment Requirements. Equivalent.

Release 1. Supersedes and is equivalent to MSAPMPER300C Issue work permits

Application

This unit of competency covers the skills and knowledge required to issue work permits. It covers an understanding of the permit system and the limitations of each permit, and making decisions regarding the need for and correct use of each permit. This unit includes the issue of any and all permits. Permits are called 'clearances' by some organisations.

This unit of competency applies to personnel who are required to issue appropriate permits to work to persons conducting a variety of activities in workplace environments in which hazards exist or specific procedures need to be followed and monitored to protect the safety of personnel and the integrity of plant or process.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

MSMWHS201 Conduct hazard analysis

Competency Field

Work control systems

Unit Sector

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes		demonstrate achievement of the element	
1	Identify need for work permit	1.1	Identify work permit needed from job scope
		1.2	Confirm with appropriate personnel the need for work permit
2	Ensure job site is prepared for authorised work	2.1	Inspect the job site
		2.2	Identify work health and safety (WHS) and environmental requirements
		2.3	Conduct hazard identification and risk assessment
		2.4	Ensure job site is prepared in accordance with specified work permit conditions
		2.5	Check permit conditions and report to appropriate personnel
		2.6	Conduct job site testing in accordance with procedures
3	Raise and issue work permits	3.1	Ensure conditions are documented on permit
		3.2	Ensure appropriate testing is carried out and results documented in accordance with procedures
		3.3	Determine an appropriate validity period
		3.4	Check that permit conditions are met (i.e. validate permit)
		3.5	Complete and authorise permit
		3.6	Ensure recipient is advised of and agrees to abide by the requirements of the permit
		3.7	Ensure recipient signs permit
4	Monitor work for compliance	4.1	Ensure regular job site inspections are done
		4.2	Monitor conditions and work progress and respond

- appropriately to changing conditions and circumstances
- 4.3 Ensure permit currency and revalidate as required
 - 4.4 Ensure permit is displayed in accordance with procedures
 - 4.5 Identify and act on incidences of non-compliance and report promptly to relevant personnel
 - 4.6 Withdraw/cancel permit if conditions warrant it
 - 4.7 Report any issues which arise with regard to work under the permit in accordance with procedures
- 5 Receive end of day report
- 5.1 Receive end of day report from permit recipients
 - 5.2 Confirm job progress and status.
 - 5.3 Revalidate/arrange for revalidation of permit as required
 - 5.4 Confirm work area has been left safe
 - 5.5 Handover ongoing permits and status of suspended permits to oncoming shift
- 6 Close work permit
- 6.1 Inspect job status
 - 6.2 Check that work undertaken satisfies permit conditions
 - 6.3 Ensure that work site is ready for a safe return to working conditions
 - 6.4 Check required returns to work status have been completed
 - 6.5 Sign off documentation and close permit in accordance with procedures
 - 6.6 Communicate worksite and process status to relevant personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements
- Dangerous Goods regulations
- Hazardous substances regulations
- Hazardous Substances Information System
- Australian Standard AS 2865 2009 Confined spaces
- Australian Standard AS 1674 Set-2007, Safety in welding and allied processes (covers all hot work)
- Australian Standard AS 4024.1-2014 Series - Safety of machinery
- Australian Standard AS/NZ 1715:2009 Selection use and maintenance of respiratory protective equipment
- National Standard for Plant [NOHSC:1010 (1994)]
- National exposure standards for atmospheric contaminants in the occupational environment [NOHSC:1003 (1995)]

Procedures

All operations are must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- emergency procedures
- workplace procedures

- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- temporary instructions
- company policy and permit control systems

Work permits

Work permits include one or more of the following:

- cold work
- excavation
- vehicle entry
- minor repairs
- working at heights
- hot work
- confined space
- electrical
- increased hazard
- permits covering a single plant or plant area, such as might be an operator's scope of responsibility
- other relevant permits

The work permit system

The work permit system includes:

- types of permits
- legislative/regulatory/standards framework
- roles and responsibilities of parties under the permit system
- specifications for undertaking the work covered by a permit
- alternative ways of conducting a job

Work specifications

Work specifications include:

- any requirements for testing of atmospheric conditions and ventilation
- safety structures and control measures
- communication
- incident response
- equipment which can and cannot be used

Safety structures and control measures

Safety structures and control measures include one or more of the following:

- isolations

- lockout/tag out
- barriers and signage
- emergency response
- gas testing/atmosphere monitoring
- standby person
- other measures specified in the permit

Confined space

AS 2865 2009 *Confined spaces* definition given for confined space is used in this Training Package, i.e.:

'An enclosed or partially enclosed space that is not intended or designed primarily for human occupancy, within which there is a risk of one or more of the following:

- (a) An oxygen concentration outside the safe oxygen range
- (b) A concentration of airborne contaminant that may cause impairment, loss of consciousness or asphyxiation
- (c) A concentration of flammable airborne contaminant that may cause injury from fire or explosion
- (d) Engulfment in a stored free-flowing solid or a rising level of liquid that may cause suffocation or drowning'

Hot work

Hot work includes:

- any activity which has the potential to be or cause a source of ignition

Hazards

Hazards include one or more of the following:

- slip/trip hazards
- PPE unavailable and not functional
- emergency equipment unavailable
- smoke, darkness and heat
- heat, smoke, dust or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment in unsafe condition with hazard controls not functional
- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration

- limited head spaces or overhangs
- working at heights, in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
- fire and explosion
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions, swarf and scrap
- spills or leaks
- extreme weather
- unsafe conditions developing through failure to conform with the provisions of a work permit
- hazards created by the nature or location of the work
- hazards created by the proximity of the work to other work or normal operations
- other hazards that might arise

Unit Mapping Information

Release 2. Addition of information missing from the Assessment Requirements. Equivalent.

Release 1. Supersedes and is equivalent to MSAPMPER300C Issue work permits

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMPER300 Issue work permits

Modification History

Release 2. Addition of information missing from the Assessment Requirements. Equivalent.

Release 1. Supersedes and is equivalent to MSAPMPER300C Issue work permits

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and demonstrate the ability to:

- recognise types of work permits required for different situations
- undertake and interpret hazard analysis
- conduct and interpret tests/inspections for gas or other hazards, including one or more of:
 - atmospheric, including explosivity
 - flammability
 - toxicity
 - temperature
 - humidity
 - combustibles, oxygen, enriched or reduced
 - electricity
 - stored pressure/energy
- ensure correct preparation of worksite is undertaken, including one or more of:
 - mechanical, electrical and other energy sources, and process isolations
 - de-energising all sources of energy/pressure
 - purging of plant
 - ventilation of plant
 - lockout/tag out procedures
 - blinding/blanking lines
 - other hazard controls
- ensure supervision/monitoring of people working under the permit
- speak clearly and unambiguously in the language of the worksite.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- the organisation's work control system
- types of permits and their application
- hazards of the area for which permit is being issued

- hazards that may be created by the interactions of the permit, the job, the process and the plant area
- focus of operation of work systems and equipment.

Assessment Conditions

- Competency must be achieved before performing this work unsupervised. Therefore this unit will typically be assessed off the job. Where assessment is undertaken on the job appropriate supervision and safety precautions must be provided.
- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should provide evidence of the ability to perform over the range of situations which might be expected to be encountered, including typical disruptions to normal, smooth work conditions
 - will require the issuing of example permits for realistic case study situations
 - may use industry-based simulation particularly where safety, lack of opportunity or significant cost is an issue.
- Off-the-job assessment must sufficiently reflect realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - demonstration of skills
 - industry based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMSUP303 Identify equipment faults

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP303A Identify equipment faults

Application

This unit of competency covers the skills and knowledge required to plan and carry out checks to identify and deal with equipment faults and to determine solutions.

This unit of competency applies to experienced personnel, such as experienced operators, team leaders or supervisors, who are required to apply knowledge of materials, product purpose and processes to identify and deal with routine and non-routine faults in equipment, propose solutions, carry out solutions within scope of authority and competence and complete logs and reports.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

This unit of competency applies to all work environments and sectors within the industry. It does not include maintenance that would require trade-level skills. It is not intended that this competency would cover maintenance that is carried out in a workshop.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify scope of operational check	1.1	Identify and classify equipment components and operating systems
		1.2	Match appropriate checks and procedures to the equipment operating systems
		1.3	Identify special checking procedures and parameters in manufacturer specifications and procedures
		1.4	Identify sources of information and data relevant to key variables
		1.5	Identify and control hazards
		1.6	Observe and undertake checks on the physical condition of equipment in accordance with procedures
		1.7	Record preliminary observations
		1.8	Discuss checking procedures with appropriate personnel and obtain necessary permission where required
2	Plan operational checks	2.1	Check specifications and notes from preliminary observations and identify areas to be clarified
		2.2	Plan sequence for checks, noting areas where results and observations should be recorded
		2.3	Ensure area is safe for operational check
		2.4	Make arrangements for any additional resources, including other employees
3	Check unit through full	3.1	Undertake operational checks observing relevant safety and operational requirements

	operational range	3.2	Confirm results and findings
		3.3	Identify faults to be dealt with
4	Identify faults and formulate recommendations	4.1	Identify impact of faults on work schedule
		4.2	Record proposals for equipment repair based on faults found, cost/time implications and workplace approval systems
		4.3	Explain proposals to relevant workplace personnel, including any options and recommendations
		4.4	Take appropriate action to return equipment to full operation in accordance with procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- plant description manuals
- manufacturer instructions and specifications
- service manuals
- machine circuit diagrams for hydraulic/pneumatic and electrical/electronic circuits
- any similar instructions provided for the smooth running of the plant

Tools and equipment Tools and equipment include one or more of the following:

- hand tools specific for the task
- product testing equipment (e.g. flowmeter, scales, tape measure, micrometer, calliper and ultrasonic thickness)
- equipment checking equipment (e.g. vibration meter, tachometer, current tester, thermal imaging and temperature gauge)

Hazards Hazards include one or more of the following:

- rotating and moving machinery
- process materials, solids, fluids and gases under pressure or flowing
- temporary connections or by-passes
- electrical, hydraulic or pneumatic energy sources
- out-of-specification operation
- smoke, darkness and heat
- heat, smoke, dust or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment failures

- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration
- limited head spaces or overhangs
- working at heights, in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
- fire and explosion
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- other hazards that might arise

Faults

Faults may arise from routine and non-routine causes and must be resolved by applying operational knowledge to apply existing, or develop new solutions, either individually or in collaboration with relevant experts to:

- determine faults needing action
- determine possible fault causes
- develop solutions to faults which do not have a known solution
- follow through items initiated until final resolution has occurred
- report faults outside area of responsibility/expertise to designated person

Non-routine faults are unexpected faults, or variations of previous faults and are associated with one or more of the following:

- out-of-specification product or variations
- response of equipment to materials variations
- new or changed materials
- changed equipment settings (e.g. higher speed or throughput)
- equipment breakdown or in need of maintenance

Operational knowledge includes one or more of the following:

- procedures
- training
- technical information such as journals, engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people

Variables	Key variables to be monitored include one or more of the following: • equipment performance (e.g. speed, output and variations) • equipment component performance • sequences and timing of operations • materials changes (desired and not desired)
Sources of information and data	Sources of information and data include one or more of the following: • plant data • log sheets • operational and performance reports • physical aspects, such as noise, smell, feel and pressure condition monitoring information • planned maintenance schedules • procedures

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMSUP303A Identify equipment faults

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP303 Identify equipment faults

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP303A Identify equipment faults

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and must include the ability to:

- check and identify a fault within an item of equipment/plant
- ensure workplace is safe for checking and maintenance of equipment
- communicate effectively with personnel and all levels
- evaluate the impact of fault in terms of work schedule, cost/time and approvals needed and make recommendations for repairs
- apply operational knowledge to non-routine problems
- take appropriate action within scope of authority in accordance with procedures.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- organisation procedures, including:
 - work permit systems
 - safety, emergency and hazard control
 - standard operating procedures (SOPs)
- hazards that may arise in the job/work environment, including:
- their possible causes
- potential consequences
- appropriate risk controls/ hierarchy of control
- principles of the operation of the equipment to be maintained:
 - operating principles for mechanical, hydraulic, pneumatic and electrical/electronic systems
 - functions and troubleshooting of internal components and their problems
 - routine and non-routine causes of equipment failures and the service conditions which may increase maintenance
- types and application of testing procedures and equipment.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.

- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operations
 - will typically include a supervisor/third-party report focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems
 - may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMSUP310 Contribute to the development of workplace documentation

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP310A Contribute to the development of plant documentation

Application

This unit of competency covers the skills and knowledge required to develop workplace documentation in response to identified information requirements. Develop covers 'develop from scratch' or 'take existing and improve'.

This unit of competency applies to experienced operators, leading hands, supervisors and similar personnel who are required to determine what needs to be done, develop the existing or new workplace documentation and apply document control.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other team members as appropriate.

This unit of competency applies to all work environments and sectors within the industry.

Work is governed by established workplace procedures, and extent of authority for drafting/document approval.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify information need/deficiency	1.1	Determine the information needs of the organisation
		1.2	Evaluate current documentation
		1.3	Recognise information need/deficiency
		1.4	Discuss information needs with appropriate personnel
		1.5	Identify purpose of, and target audience for, documentation
2	Develop workplace documentation	2.1	Specify information need and set/prioritise objectives
		2.2	Analyse existing documentation/records for compliance with identified needs
		2.3	Develop draft documentation in required format
		2.4	Issue draft documentation to appropriate personnel for review
		2.5	Edit documentation and amend in accordance with review feedback
		2.6	Complete documentation to satisfy the initial identified need/deficiency
		2.7	Check document complies with required template and document control procedures
3	Communicate changes to workplace documentation	3.1	Explain need for revised/new documentation to all relevant personnel
		3.2	Distribute documentation to all appropriate personnel
		3.3	Evaluate effectiveness of documentation.

3.4 Amend documentation if required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- document control procedures and style sheets
- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Documentation Documentation includes one or more of the following:

- maintenance logs
- non-compliance reports
- incidence and accident reports
- permits
- schematics/process flows/engineering drawings
- job cards
- SOPs
- work instructions
- operating manuals
- quality procedures
- training program contents
- material safety data sheets (MSDS)

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMSUP310A Contribute to the development of plant documentation

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP310 Contribute to the development of workplace documentation

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP310A Contribute to the development of plant documentation

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- communicate with other personnel to:
 - determine the need for and purpose of documentation development and/or amendment
 - identify specifications and format to be used
 - identify target audience
 - communicate and evaluate changes to documentation
- identify and evaluate current documentation
- convey information clearly and concisely in writing using language and structure suitable for the purpose and target audience
- apply procedures for drafting, review and revision of documentation
- apply document control.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- organisational procedures, including those covering:
 - data systems and data security
 - record keeping
 - privacy
 - intellectual property (IP)
 - document control and approvals
 - style guides and standards for documentation
 - use of internet
 - relevant standard operating procedures (SOPs)
- writing styles, including:
 - plain or technical English
 - short/simple sentences, or well developed arguments
 - dot points or use of paragraphs
 - appropriate inclusion of graphics

- sections and headings or other navigational tools
- logical sequencing of information
- distinguishing between relevant and peripheral issues
- planning, drafting and editing own work.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from work activities, which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should occur in operational workplace situations. Where this is not possible or practical assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment may use industry-based simulation for all or part of the unit where the use of real experience is not practicable.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
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MSMSUP330 Develop and adjust a production schedule

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP330A Develop and adjust a production schedule

Application

This unit of competency covers the skills and knowledge required to plan, schedule and prioritise production to meet operational requirements.

This unit of competency applies to experienced operators, team leaders or similar who are required to optimise plant production and costs of production using daily and weekly run plan guidelines/production schedules.

The person will have detailed operational and process knowledge but is not required to demonstrate 'hands on' operation of equipment as part of this competency.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

This unit of competency applies to all work environments and sectors within the industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify resources to meet production requirements	1.1	Determine demand for product
		1.2	Access and verify information on orders, stocks and delivery
		1.3	Determine plant/production equipment capacity
		1.4	Determine material requirements
		1.5	Determine human resource requirements
		1.6	Identify and control hazards
2	Develop schedules	2.1	Determine production priorities
		2.2	Identify production opportunities ('windows')
		2.3	Develop production schedules in accordance with procedures taking account of health, safety and environment (HSE) requirements
		2.4	Communicate and distribute production schedules to appropriate personnel
3	Monitor production schedules	3.1	Monitor production output against schedule
		3.2	Identify variations between production and schedule
		3.3	Record operational variation and discuss with appropriate personnel
		3.4	Identify possible cause of variation
4	Adjust schedules	4.1	Adjust schedules in response to operational variation

- 4.2 Adjust schedules in response to unexpected events
- 4.3 Distribute adjusted/amended schedules to appropriate personnel
- 4.4 Maintain product output in accordance with production and HSE requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form,

and include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Hazards

Hazards include one or more of the following:

- smoke, darkness and heat
- heat, smoke, dust or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- structural collapse
- equipment failures
- industrial (machinery, equipment and product)
- equipment or product mass
- noise, rotational equipment or vibration
- limited head spaces or overhangs
- working at heights, in restricted or confined spaces, or in environments subjected to heat, noise, dusts or vapours
- fire and explosion
- flammability and explosivity
- hazardous products and materials
- unauthorised personnel
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- extreme weather
- other hazards that might arise

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMSUP330A Develop and adjust a production schedule

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP330 Develop and adjust a production schedule

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP330A Develop and adjust a production schedule

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and must include the ability to:

- identify production objectives, priorities, targets and resource requirements
- plan, sequence and schedule production taking account of health, safety and environment (HSE) priorities
- monitor and adjust schedules in response to operational variations
- communicate effectively with other personnel.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- organisation procedures
- hazards that may arise in the job/work environment, including:
 - their possible causes
 - potential consequences
 - appropriate risk controls
 - hierarchy of control
- customer and quality requirements
- routine and non-routine causes of production variation
- relevant equipment and operational processes
- types of adjustments that can be made and their likely impact on process/plant efficiencies and production outcomes/targets.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operations

- will typically include a supervisor/third-party report focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- must include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems
- may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMSUP390 Use structured problem-solving tools

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP390A Use structured problem solving tools

Application

This unit of competency covers the skills and knowledge required to use structured process improvement tools to solve process and other problems.

This unit of competency applies to experienced operators, team leaders, supervisors or people in similar roles who are required to identify improvements and/or solve problems beyond those associated directly with the process unit/equipment.

A ‘problem’ in this context should be interpreted as ‘an opportunity for improvement’, not just something causing faulty product, product faults or process irregularities/breakdowns.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

Problem-solving techniques are often applied as group processes. Where the competency is achieved in a group context the individual being assessed must meet all aspects of the competency.

This competency does NOT cover the planning and facilitation of group problem-solving activities.

Other units of competency, including MSMOPS units, may include a problem-solving element where problems specific to that competency are to be resolved. However, this unit of competency requires structured problem-solving techniques to be applied more broadly and/or with greater depth and rigour than is implied by the problem-solving element of the other units.

This unit of competency applies to all work environments and sectors within the industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify the problem	1.1	Identify variances from desired operating/output parameters and quality
		1.2	Define the extent, cause and nature of the problem by observation and investigation
		1.3	State and specify the problem clearly
2	Determine fundamental cause of problem	2.1	Select problem-solving tool appropriate to the problem and the context
		2.2	Identify possible causes based on experience and the use of problem-solving tools/analytical techniques
		2.3	Develop possible cause statements
		2.4	Determine fundamental cause
3	Determine corrective action	3.1	Consider all possible options for resolution of the problem
		3.2	Consider strengths and weaknesses of possible options

		3.3	Determine corrective action to remove the problem and possible future causes
		3.4	Develop implementation plans identifying measurable objectives, resource needs and timelines in accordance with safety and operating procedures
		3.5	Develop recommendations for ongoing monitoring and testing
4	Communicate recommendations	4.1	Prepare report on recommendations
		4.2	Present recommendations to appropriate personnel
		4.3	Follow up recommendations if required

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Problem-solving tools/ analytical techniques

Problem-solving tools/analytical techniques include one or more of:

- basic techniques:
 - 5 why's
 - brainstorming
 - 6 hats (Edward de Bono)
 - similarity/difference analysis
- visual techniques:
 - Ishikawa/fishbone diagrams
 - logic tree
 - histograms/Pareto analysis
 - scattergrams
- process-based tools:
 - flow charts
 - process logic/process requirements
 - cause and effect diagrams/charts
 - divide and conquer
 - control charts and run charts (Shewhart charts)
- business/interpersonal techniques:
 - force field analysis
 - strengths, weaknesses, opportunities, threats (SWOT) analysis
 - plan, do, check, act (PDCA)/define, measure, analyse, improve, control (DMAIC)
- other structured processes defined in organisation procedures, (e.g. TapRoot)

Corrective actions	Corrective actions will include one or more of the following: • consideration of at least two alternative solutions • benefit-cost analysis (at least semi-quantitative, need not be in \$ terms) • health, safety and environment (HSE) impacts and controls • risk assessment (HSE, business and project) • determination of the preferred solution or a priority ranked shortlist
Implementation plans	Implementation plans to solve problems will include: • specific, measurable, achievable, relevant, timed (SMART) objectives • resource requirements (people, finances, plant/equipment, materials/consumables, time, skills and knowledge) • methods for reaching objectives • timelines • methods of checking and adjusting adherence to plan (e.g. communication and follow-up)
Problems	A ‘problem’ in this context should be interpreted as ‘an opportunity for improvement’, not just something causing faulty product, product faults or process irregularities/breakdowns and will include one or more of the following: • intractable process difficulty • observed process waste/inefficiency (‘Muda’) • issue with materials/components • procedures/practices/process conditions which might be improved

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMSUP390A Use structured problem solving tools

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP390 Use structured problem-solving tools

Modification History

Release 1. Supersedes and is equivalent to MSAPMSUP390A Use structured problem solving tools

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- identify at least one (1) problem
- analyse problem using at least one (1) analysis tool drawn from each of two (2) different groups of tools (basic, visual, process, business and organisation specific)
- select the preferred solution
- develop and use an implementation plan
- communicate effectively with other personnel.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- relevant organisation procedures
- risks, risk assessment and controls relevant to problem being analysed
- targets and measures for output and quality
- types and application of problem-solving tools/analytical techniques
- relevant equipment and operational processes.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operations
 - will typically include a supervisor/third-party report focusing on the significance of the problem being addressed. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.

- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMSUP405 Identify problems in fluid power system

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS405A Identify problems in fluid power system

Application

This unit of competency covers the skills and knowledge required to recognise and diagnose problems in hydraulic/pneumatic control systems on process equipment, and take appropriate corrective action.

This unit of competency applies to operators who are required to apply knowledge of fluid power systems and components to the identification and isolation of faults in equipment. The key factors are the diagnosis and the recommendation of action to resolve routine and non-routine faults in order to return the equipment to production.

The unit applies to all work environments and sectors within the manufacturing industry. It requires an understanding of the operation of all relevant equipment and processes but does not necessarily require them to be used personally.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify pneumatic/hydraulic system problems	1.1	Categorise the types of equipment malfunctions due to fluid power problems
		1.2	Identify the effects on product quality of fluid power problems
		1.3	Describe the function of components on the fluid power circuit diagram
		1.4	Identify possible faulty components from a circuit diagram
		1.5	Identify hazards arising from the problem and implement appropriate hazard control
2	Implement appropriate corrective action	2.1	Identify other possible problems
		2.2	Short list possible fault problems
		2.3	Investigation machine, products or data to determine most likely problem causes
		2.4	Take appropriate action to ensure problem is rectified
		2.5	Follow up on action to ensure completion in an appropriate timeframe
		2.6	Recheck after corrective action to ensure problem has been rectified
3	Develop maintenance requirements	3.1	Check manufacturer instructions to determine recommended maintenance schedule
		3.2	Check fault and maintenance history to determine adequacy of current regime and special requirements

- 3.3 Determine criticality of machine to production/business
- 3.4 Develop maintenance schedule/requirements for machine
- 3.5 Liaise with all relevant stakeholders to ensure schedule is appropriate
- 3.6 Report outcome to appropriate personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework

The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures

All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- work instructions

- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant

Equipment using fluid power control systems

Equipment that uses fluid power control systems include one or more of the following:

- pumps
- pressure controls
- directional control valves (DCVs)
- remote operated valves (ROVs)
- flow control actuators
- accumulators
- filters
- heat exchangers
- proportional, servo and cartridge valves

Non-routine problems

Non-routine problems must be resolved by applying operational knowledge to develop new solutions, either individually or in collaboration with relevant experts to:

- determine problems needing action
- determine possible fault causes
- develop solutions to problems which do not have a known solution
- follow through items initiated until final resolution has occurred
- report problems outside area of responsibility to designated person

Operational knowledge includes one or more of the following:

- procedures
- training
- technical information, such as journals and engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people

Hazards

Hazards include one or more of the following:

- high pressures (hydraulic and pneumatic)
- hot surfaces
- equipment failures
- heat, smoke, dust or other atmospheric hazards
- flammability and explosivity
- equipment or product mass
- slippery surfaces, spills or leaks
- noise, rotational equipment or vibration
- electricity
- other hazards that might arise

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMOPS405A Identify problems in fluid power system

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP405 Identify problems in fluid power system

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS405A Identify problems in fluid power system

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and demonstrate the ability to:

- identify fluid power problem and possible problem causes
- take appropriate action in a timely manner
- apply operational knowledge to non-routine problems
- develop appropriate maintenance schedule/requirements.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- hazards and hazard controls specific to the fluid power system and the plant it is used on
- principles of hydraulics/pneumatics and circuit components
- fluid power circuit diagrams
- types and causes of known fluid power problems for the plant unit and its components
- corrective action appropriate to the problem cause
- appropriate investigation procedures and use of equipment for a range of equipment faults.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant
 - will typically include a supervisor/third-party report focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - will typically include the use of an appropriate industrial item of equipment requiring demonstration of operation, start and stop procedures and responding to problems
 - may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.

- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSMSUP406 Identify faults in electronic control

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS406A Identify problems in electronic control

Application

This unit of competency covers the skills and knowledge required to recognise and diagnose control system faults in electrical/electronic control systems on process equipment. It includes the implementation of appropriate corrective action.

This unit of competency applies to technicians. The technician will be required to apply knowledge of electronic control systems and components to the identification and isolation of faults in equipment. The key factors are the diagnosis and the recommendation of action to resolve routine and non-routine faults, in order to return the equipment to production.

The operator will have detailed operational and process knowledge but is not required to demonstrate 'hands on' operation of equipment as part of this competency.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members and the control room operator, as appropriate.

This unit of competency applies to all common equipment used in the manufacturing industry and should be able to be applied to all equipment using electrical/electronic control systems. It applies to all work environments and sectors within the manufacturing industry.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes

Performance criteria describe the performance needed to demonstrate achievement of the element

1	Identify electrical/electronic control system faults	1.1	Categorise the types of machine malfunctions due to electrical and/or electronic faults
		1.2	Describe the effects on product quality of electrical and/or electronic faults
		1.3	Identify possible faulty components from a circuit diagram and knowledge of the function of each component
2	Identify maintenance requirements	2.1	Determine recommended maintenance schedule from manufacturer instructions
		2.2	Determine adequacy of current maintenance regime and any special requirements from fault and maintenance history
		2.3	Determine criticality of machine to production and/or business
		2.4	Develop maintenance schedule and requirements for machine
		2.5	Liaise with all relevant stakeholders to ensure schedule is appropriate
		2.6	Report outcome to appropriate personnel
3	Determine appropriate corrective action	3.1	Examine other possible faults
		3.2	Short list possible fault causes
		3.3	Conduct investigations of machine, products or data to determine most likely fault causes
		3.4	Take appropriate action to ensure fault is rectified

- 3.5 Follow up on action to ensure completion in an appropriate timeframe
- 3.6 Recheck after corrective action to ensure fault has been rectified

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets

- temporary instructions
- any similar instructions provided for the smooth running of the plant

Tools and equipment

Tools and equipment include one or more of the following:

- programmable logic controls (PLC) and ancillaries
- solid-state control/switching units
- switches, relays and solenoids
- position and pressure transducers
- temperature controllers

Hazards

Hazards include one or more of the following:

- electricity
- incorrect/failed connections
- insulation failure
- polarity of components
- gas
- equipment malfunction/failure
- industrial (machinery, equipment and product)
- noise, rotational equipment or vibration
- temperature from hot surfaces and equipment
- test equipment
- unauthorised personnel
- other hazards that might arise

Faults

Faults may arise from non-routine causes and must be resolved by applying operational knowledge to develop new solutions, either individually or in collaboration with relevant experts to:

- determine faults needing action
- determine possible fault causes
- develop solutions to problems which do not have a known solution
- follow through items initiated until final resolution has occurred
- report faults outside area of responsibility to designated person

Non-routine faults are unexpected faults, or variations of previous faults and include one or more of the following:

- loss of flow, power
- power failure
- component malfunction

- poor maintenance procedures
- regular maintenance
- shutdown
- motor failure effect on cycle time
- short shots
- loss of clamp pressure
- no power
- electronic/electrical faults
- analysis with PLC

Operational knowledge includes one or more of the following:

- procedures
- training
- technical information, such as journals and engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSAPMOPS406A Identify problems in electronic control

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMSUP406 Identify faults in electronic control

Modification History

Release 1. Supersedes and is equivalent to MSAPMOPS406A Identify problems in electronic control

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and must include the ability to:

- recognise and analyse control system faults
- identify and select testing methods based on cost and time effectiveness
- identify and develop maintenance requirements
- propose solutions and carry out solutions within scope of authority
- apply operational knowledge to non-routine problems
- identify and implement corrective actions
- monitor process and equipment conditions.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- fundamentals of electricity and electronics
- electronic circuit diagrams
- principles of electronic circuit components
- principles of PLC programming, troubleshooting and diagnosis
- appropriate testing procedures and use of equipment for a range of equipment faults
- interaction of process conditions on product quality
- routine and non-routine causes of equipment failures and processes to develop solutions.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant

- will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- may use industry-based simulation for part only of the unit where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from one or more of:
 - walk-throughs
 - pilot plant operation
 - demonstration of skills
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- As a minimum, assessors must satisfy the Standards for Registered Training Organisations 2015 assessor requirements.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

MSS014003 Optimise sustainability of a process or plant area

Modification History

Release 1. Supersedes and is equivalent to MSS014003A Optimise sustainability of a process or plant area.

Application

This unit of competency covers optimising the sustainability performance of a complete work area in a plant or part of the manufacturing value chain. It includes ensuring that production systems comply with sustainability and other environmental requirements and that optimal process, plant and equipment utilisation is planned and carried out. It also covers problem solving to fully meet sustainability needs and to ensure that production of finished goods meets customer requirements.

This unit applies inside organisations and their value chains and has been developed with manufacturing operations as a focus especially work areas that process materials or components to manufacture products. However, because of the range of organisations in a typical manufacturing value chain it may also be applied to other types of organisations.

The unit scope includes products made, services offered, and use of sites by an organisation or manufacturing value chain member (e.g. supplier of goods or services or a customer).

This unit describes the work conducted by senior operators, technicians, team leaders or frontline managers and other support staff who optimise process systems as part of their work function. The unit includes all items of equipment and unit operations which form part of the process of a complete area and assumes that the required production, technical, science or other operational skills and knowledge necessary to work in the process or work area have already been gained.

Environmental sensitivities referred to in this unit are at the issue level. The technical measurement of operational performance or measurement of emissions or other environmental impact is not covered by this unit.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Sustainable operations

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Analyse and evaluate current sustainability performance of process or work area	1.1	Identify sustainability goals of the enterprise as they relate to work area.
		1.2	Compare actual with possible performance.
		1.3	Identify abnormal or sub-optimal sustainability performance.
		1.4	Identify hazards associated with process, plant and equipment relevant to work area.
		1.5	Collect and evaluate relevant records to determine possible causes for sub-optimal sustainability performance.
		1.6	Use appropriate techniques to rank possible causes from most to least probable cause.
2	Develop plan to optimise sustainable performance of process or work area	2.1	Analyse causes to determine action.
		2.2	Predict the impact of a change in one unit or area on other value chain components.
		2.3	Predict the impact of a change on sustainability performance.
		2.4	Develop measurable objectives and evaluate alternatives.
		2.5	Identify requirements to implement change.
		2.6	Consult with stakeholders regarding planned changes and impacts.

		2.7	Develop optimisation plan taking account of hazards identified and sustainability implications and communicate to appropriate personnel.
		2.8	Evaluate optimisation action to determine measures of effectiveness.
3	Coordinate sustainability optimisation action plan	3.1	Coordinate all appropriate process steps and operations in order to rectify causes in process, plant and equipment performance.
		3.2	Initiate and/or implement all required optimisation actions.
		3.3	Communicate optimisation outcomes to all relevant personnel.
		3.4	Implement procedures and systems to eliminate possible future causes.
		3.5	Record all relevant information.
4	Develop continuous improvement strategies	4.1	Review sources of information to identify possible factors causing sub-optimal performance.
		4.2	Identify options for removing or controlling the risk of sub-optimal performance.
		4.3	Assess the adequacy of existing control and quality methods and systems.
		4.4	Identify opportunities to continuously improve performance.
		4.5	Develop recommendations for continual improvement of process, plant and equipment effectiveness.
		4.6	Consult with appropriate personnel and implement continuous improvement strategies.
		4.7	Document implementation of continuous improvement strategies.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Sustainability includes all of

- meeting all regulatory requirements
- conforming to all relevant industry covenants, protocols and best practice guides
- minimising ecological footprint of process, plant, product or work area
- maximising economic benefit of process plant and product to the organisation and the community
- minimising the negative work health and safety (WHS) impact on employees, community and customer (e.g. WHS impacts of process, product and wastes).

Interactions with the environment include one or more of

- drawing physical resources from the environment
- releasing materials to the environment (e.g. emissions)
- drawing energy from/releasing energy to the environment.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of

- work instructions
- standard operating procedures
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Environmental sensitivities include one or more of

- fragile areas, and rare or threatened species
- heritage or cultural sensitivity issues
- hazardous emissions

	• real or perceived overuse of scarce resources • noise • regulated emissions or other regulatory issues • community perceptions or other issues.
Performance is indicated by one or more of	• historical data and records • design performance • process/takt time requirements.
Sustainability improvements include reduction in use of one or more of	• energy • water • raw materials • emissions • embedded carbon in transport, storage, rework and errors, inefficient processes and design, and general facility efficiencies.
Sustainability related issues include one or more of	• current and future availability of raw materials • current and future availability of energy • extent and type of waste generation and disposal • efficiency of process in terms of consumption of materials and energy regarded as in short supply or which are regarded as environmentally sensitive • the extent to which the production process, product and waste affects the environment • relationship with the local and broader community, (e.g. effect of operations on aesthetic appearance, preservation of heritage, and proximity to schools and religious facilities) • extent of regulatory oversight and extent and cost of compliance.
Hazards is used to include one or more of	• sustainability hazards • environmental hazards • health hazards • safety hazards.
Data and records include one or more of	• orders, project briefs or customer specifications • hazard logs • incident reports • maintenance records • errors and non-conformance reports • production records.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS014003A Optimise sustainability of a process or plant area.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS014003 Optimise sustainability of a process or plant area

Modification History

Release 1. Supersedes and is equivalent to MSS014003A Optimise sustainability of a process or plant area.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one or more process or plant area, to:

- analyse and evaluate current production performance, and develop and implement plans to optimise process systems
- determine sustainability impacts of current processes and products in work area
- develop proposals for improvement to processes that are measurable and positively impact on sustainability.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- principles and theory of the process, equipment and systems used in the work area
- support functions needed for effective functioning of the process or work area, such as logistics, order processing, warehousing and storage, maintenance and administration
- organisational standard procedures and work instructions
- relevant regulatory requirements, including those related to sustainability and work health and safety (WHS) risk control, as appropriate to process/plant area optimisation
- starting quantity and quality of materials
- efficiency maximisation processes relevant to work area
- throughput maximisation processes relevant to work area
- energy efficiency concepts relevant to work area
- potential ecological impacts of work area processes or products
- use of utilities
- labour utilisation concepts relevant to work area
- minimisation of waste and rework
- potential of improved workplace layout and workflow.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.

- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project where optimising the sustainability performance of a complete work area in a plant or part of the value chain occurs in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS014004 Develop team strategies for more sustainable use of resources

Modification History

Not applicable.

Application

This unit of competency covers leading teams and developing strategies for more sustainable use of resources. The team may be in operations, an operational support function (e.g. maintenance, office or warehouse) or along the value chain (e.g. supplier of goods or services or a customer).

This unit applies inside organisations and their value chains. The unit has been developed with manufacturing operations as a focus. However, because of the range of organisations in a typical manufacturing value chain it may also be applied to other types of organisations.

This unit applies where a team leader needs to integrate a range of skills and knowledge covering process skills and knowledge and sustainability. The team leader must lead and assist team members to understand and apply a holistic view of their job and the team's role within the organisation and the objectives that the team must meet as part of the sustainability impacts made by the enterprise.

The unit scope includes products made or services offered, and use of sites by an organisation or manufacturing value chain member (e.g. supplier of goods or services or a customer).

Environmental sensitivities referred to in this unit are at the issue level. The technical measurement of operational performance or measurement of emissions or other environmental impact is not covered by this unit.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Sustainable operations

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Facilitate the development of process and sustainability knowledge	1.1	Identify sustainability goals of enterprise as they relate to work area.
		1.2	Ensure capability of the team.
		1.3	Develop mentoring processes for team members in process and sustainability related skills.
		1.4	Structure team activities to facilitate the ongoing development of team members.
		1.5	Arrange for the development of competency by team members as required.
		1.6	Encourage team members to apply technical knowledge to the process.
2	Facilitate team improvements to sustainability	2.1	Ensure sustainability requirements, operating procedures and other relevant documents are available to the team.
		2.2	Assist team members apply relevant information to the sustainability requirements of the team.
		2.3	Encourage team members to identify sub-optimal sustainability performance and make improvement suggestions.
3	Resource a proactive approach to	3.1	Develop communications between specialists outside the team and team members.
		3.2	Develop strategies to monitor and deal with key

	sustainability		sustainability issues in work area.
		3.3	Arrange for resources for team members to identify and take action on sustainability issues.
		3.4	Arrange workforce development for team members, as required, in proactive sustainability techniques.
4	Implement sustainability improvements for work area	4.1	Plan the implementation of team suggested and externally directed sustainability improvements.
		4.2	Facilitate team member commitment to and involvement in the implementation and monitoring of improvements.
		4.3	Encourage the application of the Plan, Do, Check, Act (PDCA) approach to the job.
		4.4	Arrange for workforce development as required to facilitate continued team involvement in sustainability improvement.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Capability of the team includes one or more of**
- necessary technical knowledge and information about relevant processes and support functions
 - sustainability related goals
 - sustainability knowledge and skills.

- Mentoring**
- mentoring applied by the team leader directly to team members

- processes include one or more of**
- mentoring arranged by the team leader to occur through other internal specialist employees
 - buddy systems within the team where more experienced team members mentor newer team members
 - external mentors and coaches.
- Interactions with the environment include one or more of**
- drawing physical resources from the environment
 - releasing materials to the environment (e.g. emissions)
 - drawing energy from/releasing energy to the environment.
- Environmental sensitivities include one or more of**
- fragile areas and rare or threatened species
 - heritage or cultural sensitivity issues
 - hazardous emissions
 - real or perceived over use of scarce resources
 - noise
 - regulated emissions or other regulatory issues
 - community perceptions or other issues.
- Sustainability improvements include reduction in use of one or more of**
- energy
 - water
 - raw materials
 - emissions
 - embedded carbon in transport, storage, rework and errors, inefficient processes and design.
- Sustainability related issues include one or more of**
- current and future availability of raw materials
 - current and future availability of energy
 - extent and type of waste generation and disposal
 - efficiency of process in terms of consumption of materials and energy regarded as in short supply or which are regarded as environmentally sensitive
 - the extent to which the production process, product and waste affects the environment
 - relationship with the local and broader community (e.g. effect of operations on aesthetic appearance, preservation of heritage, and proximity to schools and religious facilities)
 - extent of regulatory oversight and extent and cost of compliance
 - AS/NZS ISO 14001 Environmental Management Standards (or its authorised replacement or other relevant standard).

**Procedures
(written, verbal,
visual, computer
based, etc.) include
one or any
combination of**

- work instructions
- standard operating procedures
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

**Team includes one
or more of**

- formally designated work teams from all sections of the organisation, including production, maintenance, technical, administration/finance, sales and marketing
- ad hoc, temporary or permanent teams/groups who are or should be working as a team.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS014004A Develop team strategies for more sustainable use of resources.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS014004 Develop team strategies for more sustainable use of resources

Modification History

Not applicable.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one or more team, to:

- lead team effectively
- identify key features of current processes in work area
- analyse current team structure and practices for sustainability related implications
- plan, implement and monitor change at the team level.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- process skills and knowledge of team members
- procedures relevant to jobs and processes in work area
- methods of making/recommending improvements
- environmental impacts of materials and energy used/ emitted
- environmental sensitivities of all areas impacted by the work/process area (and related areas where impact spreads beyond immediate area, e.g. by loss of containment)
- root cause analysis and problem solving
- mitigation strategies as relevant to work/process area
- sustainability issues relevant to the work/process area
- standards and regulations relevant to work/process area.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.

- A third party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project where strategies for more sustainable use of resources are developed within a team context in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
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MSS015005 Develop required sustainability reports

Modification History

Release 1. Supersedes and is equivalent to MSS015005A Develop required sustainability reports.

Application

This unit of competency covers drafting reports required to meet regulatory or other sustainability reporting requirements. The reports may require the inclusion or interpretation of technical data. It includes the development of formats or internal reporting templates to meet the public reporting needs of the organisation.

This unit applies to the development, production and oversight of sustainability reports for an organisation or part of an organisation. The reports may be required for regulatory, Board, employee, shareholder or community reporting purposes. Reports may be completed by an individual or be prepared by a team. Where team preparation is involved this unit supplies the skills for coordinating the report production.

Reports covered by this unit may relate to all aspects of an organisation's sustainability or may focus on particular aspects, such as carbon footprint, waste generation and control, environmental, ecological and community impacts.

The complexity of the presentation and organisation of data will vary according to the reports required and type and scale of the organisation's processes. A manager or technical specialist who had a major responsibility for sustainability as part of a broader work role would typically undertake this, or sustainability may be their primary work responsibility. The manager or technical specialist may undertake this alone or as part of a team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Sustainable operations

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Determine requirements of sustainability report	1.1	Establish purpose of report.
		1.2	Determine compliance requirements of report.
		1.3	Identify any commercial requirements which may be impacted by these requirements.
		1.4	Determine benefits which may be obtained from report for the organisation.
2	Locate data sources and processes needed to generate required information	2.1	Identify sources of data currently available within the organisation.
		2.2	Identify external sources of data required.
		2.3	Identify any data gaps and develop strategies for obtaining required data.
		2.4	Obtain necessary authority to access external data sources, as required.
		2.5	Negotiate with relevant stakeholders to obtain necessary data which is not currently available.
3	Develop templates, protocols and procedures needed for report	3.1	Develop data collection and information reporting templates and procedures.
		3.2	Implement systems and procedures for obtaining required information from collected data.
		3.3	Develop templates and protocols for required report sections and appendices.
		3.4	Ensure other report contributors have the required competencies and resources to draft their input.

	3.5	Agree on timelines for preparation of report components.
4	Compile required report	4.1 Monitor the development of report components.
		4.2 Take action to ensure timely completion of components to requirements.
		4.3 Assemble components into report.
		4.4 Complete report.
		4.5 Review and adjust completed report, as required.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Compliance requirements include one or more of	• regulatory requirements (e.g. energy efficiency, hazardous waste, National Pollutant Inventory (NPI), emissions and carbon)
	• state/federal environment departments
	• local government
	• energy/water authorities
	• Therapeutic Goods Administration (TGA)
	• AS/NZS ISO 14001 Environmental Management Standards (or its authorised replacement or other relevant standard)
	• other regulatory bodies.
Commercial reporting	• Australian Stock Exchange (ASX)
	• Australian Competition and Consumer Commission (ACCC)

**requirements
include reports
required by, or for
one or more of**

- Board of Directors
- shareholders
- lending and insurance organisations
- employees
- community groups.

**Sustainability
impact includes one
or more of**

- resource footprint (e.g. water, carbon and carbon equivalent) of product and process
- current and future availability of raw materials
- current and future availability of energy
- waste generation and disposal
- efficiency of process
- the extent to which the production process and product affects the environment
- relationship with the local and broader community
- extent of regulatory oversight and cost of compliance.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS015005A Develop required sustainability reports.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS015005 Develop required sustainability reports

Modification History

Release 1. Supersedes and is equivalent to MSS015005A Develop required sustainability reports.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one or more reports, to:

- accurately identify compliance and commercial aspects of the report
- ensure information collection and processing are appropriate for scope of required report
- produce report to required format and timeline.

Knowledge Evidence

Must provide evidence that demonstrates sufficient knowledge to interact with relevant personnel and be able to draft/develop sustainability reports including knowledge of:

- sustainability related regulatory and other compliance reporting requirements
- commercial reporting requirements
- possible organisational benefits from sustainability reporting
- internal and external data sources
- organisational protocols and procedures for obtaining and using data
- data manipulation and interpretation
- project planning and control
- editing and reviewing of report inputs by others
- AS/NZS ISO 14001 Environmental Management Standards (or its authorised replacement or other relevant standard).

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.

- A third party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project where a sustainability report is developed for an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

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MSS024003 Apply an understanding of environmental principles to a site

Modification History

Release 1. Supersedes and is equivalent to MSS024003A Apply an understanding of environmental principles to a site

Application

This unit of competency covers the ability to ‘read the landscape’ in terms of the physical and biological components of the environment and the ecological linkages in operation at a site. Personnel are required to apply basic principles of geomorphology, hydrology and ecology in a systematic, scientific appraisal of site condition. This requires sufficient knowledge of chemistry, physics, geology and biology to support a scientific approach to field ecology.

This unit of competency is applicable to environmental technicians working in a range of industry sectors, such as environmental monitoring, and sampling (e.g. air quality, water, soil and noise); environmental compliance, auditing and inspection; groundwater and clean water (e.g. catchment supply, environmental flows); water treatment, storm and wastewater management; solid and hazardous waste management; site remediation; management of contaminated sites; geotechnical services and civil engineering; and natural resource management.

While no specific licensing or certification requirements apply to this unit at the time of publication, environmental monitoring and management activities are governed by relevant legislation, regulations and/or external accreditation requirements. Local requirements should be checked.

Pre-requisite Unit

Nil

Competency Field

Environmental monitoring

Unit Sector

Environmental

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Prepare for site inspection	1.1	Obtain and use maps, photos and related documentation to gain a preliminary understanding of site features.
		1.2	Collect site-specific or regional data on expected flora, fauna, soils and climate.
		1.3	Review site history and previous environmental or ecological studies, if available.
		1.4	Review all emergency plans, risk assessments, and safety and environmental management requirements associated with the field activities.
		1.5	Review legislative and planning instruments applicable to current and future site usage.
		1.6	Confirm site access requirements and identify potential site hazards.
2	Conduct initial site survey	2.1	Sketch, map and/or photograph the site.
		2.2	Observe and record the surface geology and geomorphology of the site.
		2.3	Observe and record hydrology of the site.
		2.4	Observe and record the major flora of the site.
		2.5	Observe and record evidence of site fauna.
		2.6	Observe and record infrastructure and other modifications to the site.
		2.7	Consider the potential for presence of cultural and indigenous heritage items and record, as necessary.
		2.8	Check for evidence of illegal or inappropriate activities.
3	Make an initial assessment of site condition	3.1	Use geomorphological and hydrological observations to describe surface condition and infer potential future impacts.

		3.2	Make inferences on apparent ecological health of the site to plan for an initial ecological study of the site.
		3.3	Determine the physical, chemical and biological parameters that would need to be measured and/or sampled during subsequent ecological appraisal of the site.
4	Prepare for field study	4.1	Identify and describe the biological and chemical components of interest, sampling areas and field techniques to be used.
		4.2	Identify, obtain and check required equipment and materials required for field study.
		4.3	Securely stow all field equipment in vehicle to prevent damage in transit.
		4.4	Safely transport all field equipment to site and prepare it for use.
5	Perform a basic ecological field study of the site	5.1	Perform ecological sampling for abundance and diversity parameters using the general techniques of transects and quadrats.
		5.2	Record appropriate descriptions of the habitat structure.
		5.3	Perform sampling for simple population, demographic and age structure parameters.
		5.4	Perform simple sampling and measurements on abiotic components.
		5.5	Perform simple targeted species sampling.
		5.6	Ensure compliance with relevant legislation, policy, codes of practice and accepted workplace procedures.
6	Finalise field study	6.1	Ensure all samples and data are stored safely.
		6.2	Rehabilitate sampling sites to render them safe and minimise environmental impacts.
		6.3	Clean all equipment, containers, work area and vehicles

			according to workplace procedures.
		6.4	Pack and safely transport all samples, equipment and supplies back to home base.
		6.5	Ensure dispatch of collected samples for subsequent analysis, as necessary.
		6.6	Check serviceability of all equipment before storage.
7	Process and present field data	7.1	Summarise field data using simple calculations, graphs, tables and/or maps.
		7.2	Provide reports that include simple conclusions and interpretations based on raw or summarised data.
8	Maintain a safe work environment	8.1	Use defined safe work practices and personal protective equipment (PPE) to ensure personal safety and that of others.
		8.2	Minimise the generation of waste.
		8.3	Ensure the safe collection of all hazardous wastes for appropriate disposal.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Legislation, regulations, standards, codes,

- federal legislation, such as the Environment Protection and Biodiversity Conservation Act, Australian Heritage Council Act, Native Title Act and National Environmental

workplace procedures and requirements include the latest version of one or more of:

Protection Measures

- state/territory government legislation and local government by-laws, policies, regulations and plans dealing with land use; environmental protection; cultural/heritage sites; vegetation management; nature conservation and wildlife/plant protection; water and water management; soil conservation; pollution and contaminated sites; fisheries, forestry and mining operations
- legislation, standards and codes of practice for workplace health and safety (WHS); care and use of animals for scientific purposes; handling of dangerous goods
- Australian and international standards covering environmental management, such as AS/NZS ISO 14000 Basic Set:2007 Environmental Management Basic Set, and AS 1726 Geotechnical site investigations;
- registration/licensing and/or accreditation requirements
- workplace environmental management plans and procedures for specific sites and/or activities (e.g. sampling, monitoring, construction and mining)
- workplace documents, such as standard operating procedures (SOPs), work schedules, recording and reporting procedures, equipment manuals and warranties; safety data sheets (SDS) and safety procedures; waste minimisation, containment, processing and safe disposal procedures.

Ecological principles and concepts include one or more of:

- ecosystem, biome and major ecosystem types
- ecological niche and biogeography
- trophic dynamics, autotrophs, heterotrophs and detritivores, and food webs
- distribution and abundance of organisms, populations and communities, and biodiversity
- abiotic and biotic components and their interrelationships and dependencies
- energy and material flows and cycles, including biogeochemical cycles
- population ecology:
- distribution, abundance and dispersion
- growth rates and age structures
- migration and dispersal in space and time
- behavioural ecology (communication and learning, aggression and territoriality, and social group dynamics)
- community ecology (ecological interactions):
- intra/interspecific competition

- concepts of coexistence, adaptive and competitive, including mimicry, coevolution, parasitism, mutualism, commensalism and predator/prey systems
- species diversity in time and space.

Earth science principles and concepts include one or more of:

- geological concepts and principles, such as:
 - earth structure and plate tectonics
 - classification of rocks (e.g. igneous, sedimentary, volcanic and stratigraphy)
 - weathering
- geomorphological concepts and principles, such as:
 - erosion and mass wasting
 - transportation and deposition, and sedimentation
 - fluvial, aeolian, hillslope and weathering processes
- soil science concepts and principles, such as:
 - soil classification
 - soil formation and soil profiles
 - pedology
 - edapology.

Hydrological principles and concepts include one or more of:

- aspects of the hydrologic cycle, such as:
 - run-off
 - infiltration
 - subsurface flow
 - water quality
 - ecohydrology
 - hydrogeology
 - water resources
- aspects of hydrologic measurement such as:
 - surface flows (stream gauging)
 - groundwater (infiltration and flow)
 - precipitation and evaporation.

Workplace procedures for field activities include one or more of:

- use of field notebooks or log books
- SOPs covering fieldwork, sampling and testing
- equipment operating manuals, calibration procedures, instrument fault-finding procedures and general maintenance and repair procedures
- emergency, first aid and survival procedures

- requirements related to protection of the environment
- incident/accident/injury report forms.

Field monitoring activities include one or more of:

- sample collection, preservation, labelling, storage and transportation according to workplace procedures
- use and calibration of field instruments according to written instructions
- performance of field tests for specific parameters using standard methods
- recording of data
- safe operation of motor vehicles and boats.

Hazards include one or more of:

- solar radiation, dust and noise
- personnel getting lost
- accidents, emergencies and incidents, such as snake, insect or animal bites
- exposure to severe weather conditions
- manual handling of heavy objects
- vehicle and boat handling in rough/remote conditions.

WHS and environmental management requirements include:

- compliance with relevant federal/state/territory WHS legislation at all times
- assuming that samples are potentially hazardous and applying standard precautions
- accessing and applying current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and state/territory Departments of Health, where relevant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS024003A Apply an understanding of environmental principles to a site

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS024003 Apply an understanding of environmental principles to a site

Modification History

Release 1. Supersedes and is equivalent to MSS024003A Apply an understanding of environmental principles to a site

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- planning and conducting at least one (1) site appraisal that involves an initial survey and assessment of site condition and a basic ecological field study
- applying relevant aspects of environmental legislative and planning framework to site appraisal
- interpreting emergency, safety or environmental management plan requirements and procedures for conducting site inspections, surveys and ecological field studies
- researching, reviewing and summarising site information, including its environmental history
- accurately observing and recording the site's significant features, including the ability to 'step back' and carefully consider observations and inferences
- assessing site condition and determining relevant parameters to be measured/sampled during ecological field study
- planning and conducting an ecological study to obtain relevant and reliable data
- setting-up, calibrating and using instruments and equipment under laboratory and field conditions
- applying specified methods and data quality procedures to accurately perform field sampling and measurements
- applying a working knowledge of relevant terminology, concepts and principles in geology, geomorphology, hydrology and ecology to provide a scientific, systematic appraisal of site environmental condition
- seeking advice when issues/problems are beyond scope of competence/responsibility
- using clear and concise verbal communication to convey information and avoid or resolve work conflicts
- preparing concise and accurate reports that contain simple conclusions and interpretations based on raw or summarised data
- following procedures for working safely, transporting and storing equipment, minimising environmental impacts and responding to emergency incidents and accidents.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- scientific terminology for environmental and ecological systems relevant to job role
- fundamental concepts and principles in chemistry, physics, geology and biology to support a scientific approach to basic field ecology, including:
 - structure of earth systems, including lithosphere, hydrosphere, atmosphere and biosphere (ecosphere)
 - geomorphology, climate and hydrology
 - energy and material flows and cycles, including biogeochemical cycles
- fundamentals of ecology, including:
 - ecosphere, biome and major ecosystem types
 - trophic structure of ecosystems, and hierarchies
 - organism, population, community, ecosystem hierarchy; habitat and biodiversity
 - abiotic and biotic components and their interrelationships and dependencies
 - ecological systems and dynamics; stability, succession and disruption
- specific legislation, policies and codes of practice related to ecological field activities
- ecological, chemical and physical field monitoring procedures relevant to job role
- procedures for maintaining, storing and transporting samples/specimens to ensure their wellbeing, viability and integrity
- relevant hazards; health, safety and environment requirements, including field safety/survival principles.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace, or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept in each case).
- Holistic assessment methods include:
 - review of data, results and site reports prepared by the candidate
 - feedback from supervisors that the candidate consistently follows workplace procedures when conducting site appraisals; works safely; accurately observes site features; and produces work outputs within agreed timeframes
 - review of candidate's responses to simulated emergency incidents, accidents and/or field survival scenarios

- oral and/or written questions to assess the candidate's understanding of scientific terminology, concepts and principles associated with appraising the environmental condition of sites; regulations and workplace procedures associated with field activities; sampling and measurement methods; and interpretation of site observations
- observation of the candidate conducting site appraisals.
- Access is required to all instruments, equipment, materials, workplace documentation, procedures, and specifications associated with this unit, including, but not limited to:
 - access to suitable sites and a vehicle
 - survey equipment, sampling/monitoring equipment, cameras, consumables, maps and flora/fauna keys
 - documentation, including site information, environmental management plans, codes of practice and field protocols, equipment manuals, workplace procedures and test/survey methods.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing environmental monitoring, management or technology related services about performing the competency being assessed within the last twelve months.

Links

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MSS402001 Apply competitive systems and practices

Modification History

Release 1 - Supersedes and is equivalent to MSS402001A Apply competitive systems and practices

Application

This unit of competency covers the skills and knowledge required to implement basic improvement practices within an organisation using competitive systems and practices. The unit focuses on bringing together the basic concepts and the holistic application of these basic concepts and processes to operations. It would typically be carried out working as part of a team.

This unit applies to an individual in an organisation that has embarked on competitive systems and practices. The unit covers the skills and knowledge required to contribute to the competitive systems and practices processes and assumes that they are to be used within the scope of the individual's job and authority.

This unit requires the application of skills associated with planning and organising an individual's own role within the competitive systems and practices framework.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.	demonstrate achievement of the element.
1 Identify own place in the value chain	1.1 Identify customers relevant to own work and their needs/requirements. 1.2 Identify suppliers for own work. 1.3 Identify value contributions along the chain. 1.4 Identify and recommend methods of increasing own contribution to the value chain.
2 Improve the product and process value	2.1 Identify customer features/benefits in the product and process. 2.2 Identify aspects of product and process which contribute to customer features/benefits. 2.3 Identify aspects of product and process which do not contribute to customer benefits/features. 2.4 Recommend methods of reducing waste and increasing features/benefits.
3 Use competitive systems and practices	3.1 Identify competitive systems and practices used in organisation and own work area. 3.2 Apply practices appropriate for the job or process. 3.3 Monitor the job/process and make adjustments to improve it in accordance with procedures. 3.4 Identify own skill requirements and seek skill development, if required.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Customers include one or more of:

- internal or external customers and should be sufficiently close to the individual's work as to be easily identifiable
- final customers used as the basis for the identification of value and waste.

Suppliers include one or more of:

- internal suppliers
- external suppliers sufficiently close to the individual's work as to be easily identifiable.

Procedures (written, verbal, visual, computer based, etc.) include one or more of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions

- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402001A Apply competitive systems and practices

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402001 Apply competitive systems and practices

Modification History

Release 1 - Supersedes and is equivalent to MSS402001A Apply competitive systems and practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to always apply competitive systems and practices to their own job to:

- identify own place in the value chain relevant to their job
- use competitive systems and practices tools and thinking
- recommend improvements in product and/or process.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- customer requirements and their role in fulfilling them
- the value chain for products they make and their place in it
- identification of muda (waste) and its reduction.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the application of competitive systems and practice in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.

- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402002 Sustain process improvements

Modification History

Release 1. Supersedes and is equivalent to MSS402002A Sustain process improvements

Application

This unit of competency covers the skills and knowledge required by an individual to prevent process improvements in their own work from slipping back to former practices or digressing to less efficient practices.

This unit applies to organisations implementing competitive systems and practices and continuous improvement. It covers the skills needed to ensure that process improvements are sustained and opportunities taken to suggest further improvements.

Improvement initiatives can be made by any of a number of methods and by teams or individuals. The unit assumes that desired levels of performance or quality are known to employees.

The unit can be applied to all areas of an organisation, including production, maintenance, logistics and office functions.

This unit requires the application of skills associated with problem solving, initiative and enterprise and self-management in order to understand implement and monitor improvement practices. It also requires the ability to identify and address personal skill gaps in order to manage own ability to implement change.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Examine previous improvements	1.1	Identify impact of previous process improvements to equipment, operations, services or products in own work area.
		1.2	Identify improvements where objectives have not been met.
2	Implement corrective actions	2.1	Identify corrective actions that can be taken by self on process improvements that have not met objectives.
		2.2	Obtain any required approvals.
		2.3	Identify any additional, personal skill gaps and seek skill development.
		2.4	Adopt improved processes.
3	Check changes	3.1	Identify claimed improvements.
		3.2	Identify methods of observing and measuring claimed improvements in own work area.
		3.3	Check if claimed improvements are occurring and report problems in accordance with procedures.
4	Check for further improvements	4.1	Look for areas of possible further improvement.
		4.2	Discuss further improvements with peers and supervisors.
		4.3	Take action to implement improvements in accordance with procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Customers include one or more of:**
- internal customers
 - external customers sufficiently close to the individual's work as to be easily identifiable
 - final customers used as the basis for the identification of value and waste.

- Suppliers include**
- internal suppliers

one or more of:

- external suppliers sufficiently close to the individual's work as to be easily identifiable.

Measuring improvements includes one or more of:

- personally taking measurements
- arranging for measurements to be taken/made by appropriate personnel.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Corrective actions to sustain improvements include one or more of:

- techniques for preventing mistakes by designing the operations process, equipment and tools so that an operation literally cannot be performed incorrectly (e.g. baka-yoke)
- techniques that generate warning signals where a mistake is about to be performed (poka-yoke)
- administrative techniques, such as procedure/work instruction changes
- skilling techniques, such as training, mentoring, demonstration
- process techniques, such as changing the process/conditions/variables.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402002A Sustain process improvements

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402002 Sustain process improvements

Modification History

Release 1. Supersedes and is equivalent to MSS402002A Sustain process improvements

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to examine three (3) or more previous improvements, including one (1) or more where improvement objectives have not been met, and to:

- identify corrective actions that can be taken by self
- implement those corrective actions
- check whether the claimed improvements have occurred
- check for further improvements.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- muda (waste)
- indicators of processes not delivering claimed improvements
- baka-yoke and poka-yoke techniques.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include actions to sustain process improvements in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.

- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402010 Manage the impact of change on own work

Modification History

Release 1. Supersedes and is equivalent to MSS402010A Manage the impact of change on own work

Application

This unit of competency covers the skills and knowledge required by an individual to effectively manage the changes in their own work resulting from their organisation's implementation of competitive systems and practices.

This unit applies to an individual in an organisation implementing competitive systems and practices that affect the individual's own work. The unit includes the skills required to positively participate in ongoing and continuous change as it affects their work. The individual will be expected to deal with these changes as part of a team and to give feedback from their own perspective.

This unit requires the application of skills associated with problem solving, planning and organising and self-management for assessing and managing the impact of change on own work. This unit also requires the ability to seek information and feedback from team members on the impact of changes and suggested improvements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Examine the impact of change on own work practices	1.1	Identify competitive systems and practices relevant to changes in own work.
		1.2	Examine changes to work flow.
		1.3	Examine changes to equipment/process/physical environment.
		1.4	Examine changes to work relationship with team members and other teams.
		1.5	Examine changes to data collection needs.
		1.6	Examine changed work for impacts on health, safety and environment (HSE).
		1.7	Examine changes to quality requirements.
		1.8	Identify any additional individual skill needs.
		1.9	Identify other areas requiring assistance.
2	Implement change	2.1	Review changes which may have an adverse impact with team leader.
		2.2	Adopt changes to individual work practice.
		2.3	Seek assistance in gathering/processing data, as required.
		2.4	Implement the data collection/processing and take actions on resulting information in accordance with procedures.
		2.5	Seek assistance/training to meet needs caused by change.
3	Implement continuous improvement	3.1	Critically examine all changes.
		3.2	Identify impacts of changes both up and down the immediate value stream.

- 3.3 Identify areas for improvement.
- 3.4 Make recommendations for improvement in accordance with procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Impact of change

- elements being undertaken individually or as part of a team

may include one or more of:

- seeking assistance from team leaders for areas outside the employee's range of responsibility and authority.

Procedures (written, verbal, visual, computer based, etc.) include one or more of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Gathering and monitoring performance data include one or more of:

- manual gathering by individual employees through charts, tally sheets or keypad/board entry
- automatic collection through software, such as SCADA software, ERP systems, MRP and proprietary systems.

Continuous improvement (kaizen) includes evaluation of one or more of:

- time required
- resources used
- resultant quality
- other aspects relevant to the process.

Stages where value stream actions may occur include one or more of:

- sales outlet/representative
- information gathering, data analysis and research
- product design
- raw material sourcing
- intermediate processing
- final assembler/collation/preparation
- support services (e.g. accounting, finance and legal)
- storage and delivery to customer
- after market support.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402010A Manage the impact of change on own work

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402010 Manage the impact of change on own work

Modification History

Release 1. Supersedes and is equivalent to MSS402010A Manage the impact of change on own work

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more changes, to:

- identify competitive systems and practices used in their own workplace
- identify change and its impact on own work practices in relation to implementation of competitive systems and practices
- adopt change and seek any required assistance
- identify areas for improvement.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision:

- features of common competitive systems and practices in use in own workplace
- sources of data on the process/plant
- methods of determining own skill needs
- health, safety and environment (HSE) principles relevant to own job
- change implementation contacts and procedures
- employee assistance mechanisms within organisation.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include evidence of responding to change in own workplace

- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations. Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including, relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

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MSS402021 Apply Just in Time procedures

Modification History

Release 1. Supersedes and is equivalent to MSS402021A Apply Just in Time procedures

Application

This unit of competency covers the skills and knowledge required to work in an organisation implementing and/or utilising Just in Time (JIT) procedures.

This unit applies to an individual working in an organisation following JIT who will need to follow procedures which are specific to JIT, such as the controlled flow of material (e.g. the use of kanban and elimination of waste). This will involve the individual in the application of the pull system to their job and the authorisation of product/material flows in accordance with procedures and their level of authority.

This unit requires the application of skills associated with planning and organising and self-management to deliver product on demand using necessary tools, equipment and processes to meet production requirements. The unit also requires an ability to recognise and act on problems that may interfere with meeting production demands.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Respond to indicator of demand	1.1	Identify pull of product through work role.
		1.2	Recognise indicator of flow authorisation.
		1.3	Identify production or service required.
2	Make products or deliver service to demand	2.1	Make product or deliver service as required by ticket.
		2.2	Identify any factors likely to prevent demand being satisfied in own work or work of the team.
		2.3	Take action in accordance with procedures.
3	Update demand information as required	3.1	Record information on ticket to procedures, as required.
		3.2	Facilitate operation of flow authorisation as part of work.
4	Recommend improvements	4.1	Examine the operation of the JIT system as it relates to own work.
		4.2	Identify areas for improvement.
		4.3	Identify any additional personal skill requirements to implement JIT procedures.
		4.4	Recommend improvements.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect

performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.
- JIT requires availability:**
- precisely when the service, product or operation is to be produced or undertaken
 - in the right quantity and at the right quality.
- Product includes one or more of:**
- a physical product
 - a supporting utility service, such as water, gas and power
 - some other service (e.g. cranes and forklifts).
- Indicator of demand includes one or more of:**
- kanban bin, ticket or similar
 - some other indicator of demand pull which authorises production or movement of an item (in some plants, this may also include authorisation using SCADA software).
- Procedures (written, verbal, visual, computer based, etc.) include one or**
- work instructions
 - standard operating procedures (SOPs)
 - safe work method statements
 - formulas/recipes

more of:

- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402021A Apply Just in Time procedures

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402021 Apply Just in Time procedures

Modification History

Release 1. Supersedes and is equivalent to MSS402021A Apply Just in Time procedures

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more JIT procedures, to:

- identify the indicators of demand and the flow authorisation system in their own workplace
- relate products and services supplied by suppliers and customers to the flow authorisation system
- interpret received indicators of demand correctly for quantity, quality and time of delivery
- contribute suggestions for improvement.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- JIT methods relevant to own job
- relevant indicator of demands for own job
- own role in flow authorisation
- faults and other issues that may threaten the JIT delivery of own product or service
- procedures for recommending improvements.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include JIT procedures in own workplace

- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations. Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

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MSS402030 Apply cost factors to work practices

Modification History

Release 1. Supersedes and is equivalent to MSS402030A Apply cost factors to work practices

Application

This unit of competency covers the skills and knowledge required by an individual to identify cost components in their work and to be able to determine, in general terms, the cost impacts of alternative actions.

This unit applies to an individual who is required to contribute to, and be involved in, the assessment of cost factors in their work. This may be done individually or in a team environment.

The unit covers the skills to be able to assess the relative costs of the alternatives and use this as one of the key factors in making decisions. Decisions are made within the scope of the employee's authority and according to procedures. Typical decisions include those that contribute to the efficient organisation of own work and the improvement of production time and cycle times.

This unit requires the application of skills associated with problem solving to identify cost factors and cost implications of own work and self-management to apply cost-effective practices.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Identify the major cost components of product or process in own work area	1.1	Identify cost components in the product or process in own work area.
		1.2	Recognise the impact of current or alternative actions on costs.
2	Identify constraints to cost-efficiency	2.1	Identify required production/process rate and major costs.
		2.2	Identify costs factors under individual or team control.
		2.3	Relate identified costs factors to impact on overall cost of production/process.
		2.4	Identify cost factors that are a constraint to cost-efficiency in own work area.
3	Apply cost-efficient work practices	3.1	Identify and explain to relevant people the implications of possible actions/changes to improve cost-efficiency in simple financial terms.
		3.2	Identify non-financial implications of proposed changes in discussion with relevant people.
		3.3	Select actions which minimise overall costs.
		3.4	Monitor actions to ensure cost-efficiency in own work area is maintained.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:	• lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree.
Cost components include all of:	• fixed and variable costs, such as power/energy, materials, plant and equipment, production or process time, including impact of salary and wages • office expenses, such as telephone and internet • government taxes and charges.
Process includes one or more of:	• production • maintenance • logistics • office • other support processes in an organisation.
Overall cost includes all of:	• the assessment of negative and positive financial implications • negative long-term issues, such as work health and safety (WHS), environmental and regulatory issues.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402030A Apply cost factors to work practices

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402030 Apply cost factors to work practices

Modification History

Release 1. Supersedes and is equivalent to MSS402030A Apply cost factors to work practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, on one (1) or more occasions to use cost factors in making a decision related to their workplace, and to:

- identify major cost components
- distinguish components which they can control from those they can't
- make decisions which minimise overall cost and explain these to stakeholders.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- concepts of expense, income and capital
- fixed and variable cost components relevant to own work:
 - power/energy
 - materials, plant and equipment
 - production or process time, including impact of salary and wages
 - office expenses
 - government taxes and charges
- relative impact of each of these
- financial and non-financial impacts of cost reductions
- the difference between internally and externally controlled costs
- difference between overhead, labour and consumables.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.

- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment will use a real project in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402031 Interpret product costs in terms of customer requirements

Modification History

Release 1. Supersedes and is equivalent to MSS402031A Interpret product costs in terms of customer requirements

Application

This unit of competency covers the skills and knowledge required by an individual to be able to identify the major cost components of either products or processes, the basic relationship of these to customer benefit, and use this to help minimise waste (defined as anything not delivering value as defined by the customer). It has a different focus to *MSS402030 Apply cost factors to work practices*, which focuses on costs in isolation, whereas this unit regards all costs not directly leading to customer benefit as waste.

This unit applies to an individual who uses their understanding of the customer's requirements of the product or process being undertaken as the basis for investigating work processes to identify waste sources and then takes action relevant to their level of competency and authority to reduce this waste. It requires an understanding of both the cost factors in the products they make and also the benefits which the customer derives from the product.

This competency may be performed individually or in a team-based environment.

This unit requires the application of skills associated with analysis and problem solving to identify waste and determine ways to minimise waste. This unit requires initiative and enterprise and application of learning in concepts of waste and waste minimisation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Identify cost components deriving from customer benefit and other costs	1.1	Identify customer features/benefits in product or process being undertaken.
		1.2	Identify cost components which deliver customer features/benefits and those which do not.
2	Compare required performance of product or process steps with actual performance	2.1	Identify performance required to meet customer needs in own work and that of team.
		2.2	Identify actual performance.
		2.3	Compare cost components of products or process with current customer-related targets.
		2.4	Separate costs components into those that contribute to customer features/benefits and those that do not.
		2.5	Determine non-contributing cost components which are under control of the individual or team.
3	Minimise waste	3.1	Recommend changes to eliminate or reduce waste.
		3.2	Adopt changes which minimises waste.
		3.3	Monitor effect of changes to ensure gains are made against customer features/benefits.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:	• lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just In Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree.
Customer features/benefits include all of:	• characteristics of the product or service which the customer perceives as meeting their need • characteristics of the product or service which the customer perceives as adding value • financial or features items which the customer perceives and a benefit.
Performance includes all of:	• takt - the allowable time to produce one product at the rate and quality customers are demanding it • the rate of output of the plant compared to the takt time.
Customer-related	• internally set financial targets that contribute to meeting customer

targets includes all of:

- features/benefits
- operational targets that contribute to meeting customer features/benefits
- other targets that contribute to meeting customer features/benefits.

Contributing cost components include all of:

- costs that make a direct contribution to customer features/benefits.
- costs that need to be incurred (although they may be minimised) in order to gain the customer feature/benefit.

Non-contributing cost components include all of:

- costs that do not contribute to customer features/benefits
- costs that must be maintained, such as regulatory compliance costs which do not contribute to customer features and so should be minimised
- costs that neither contribute to customer features/benefits nor must be maintained (muda) and so should be eliminated if possible.

Muda (waste) includes all of:

- any activity which does not contribute to customer or organisation benefit/features in the product
- activities which do not yield any benefit to the organisation or any benefit to the organisation's customers
- excess production and early production
- delays
- movement and transport
- poor process design
- inventory
- inefficient performance of a process
- making defective items.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402031A Interpret product costs in terms of customer requirements

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402031 Interpret product costs in terms of customer requirements

Modification History

Release 1. Supersedes and is equivalent to MSS402031A Interpret product costs in terms of customer requirements

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, on one (1) or more occasions to recommend muda reduction related to their workplace, and to:

- identify and distinguish between cost components leading to customer benefit or otherwise
- take steps to minimise muda in their workplace.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- contributions towards customer perceived benefit
- concepts of expense, income and capital
- fixed and variable cost components relevant to own work:
 - power/energy
 - materials, plant and equipment
 - production or process time, including impact of salary and wages
 - office expenses
 - government taxes and charges
- relative impact of each of these
- financial and non-financial impacts of cost reductions
- the difference between internally and externally controlled costs
- difference between overhead, labour and consumables.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria

- multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402040 Apply 5S procedures

Modification History

Release 1. Supersedes and is equivalent to MSS402040A Apply 5S procedures

Application

This unit of competency covers the skills and knowledge required by an individual to apply 5S procedures to their own job and work area. The unit assumes the individual has a particular job and an allocated work area and that processes in the work area are known by the individual.

This unit applies to an individual in an organisation who works in an operational position as part of production, maintenance, logistics, etc. The unit can also apply to individuals in other organisations who have a discrete role and responsibility for individually managed processes.

This unit applies where an organisation has decided to embark on a competitive systems and practices strategy and as part of this has adopted the philosophy of 5S as one of the tools to improve performance. The employee needs to apply 5S to their job and work area and maintain the housekeeping and other standards set by 5S.

This unit requires the application of skills associated with planning and organising, problem solving and self-management, in order to identify and implement 5S housekeeping practices.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Sort needed items from unneeded	1.1	Identify all items in the work area.
		1.2	Sort items to achieve deliverables and value expected by downstream and final customers.
		1.3	Sort items required for regulatory or other required purposes.
		1.4	Place any non-essential item in an appropriate place other than the workplace.
		1.5	Regularly check that only essential items are in the work area.
2	Set the workplace in order	2.1	Identify the best location for each essential item.
		2.2	Place each essential item in its assigned location.
		2.3	After use immediately return each essential item to its assigned location.
		2.4	Regularly check that each essential item is in its assigned location.
3	Shine the work area	3.1	Keep the work area clean and tidy at all times.
		3.2	Conduct regular housekeeping activities during shift.
		3.3	Ensure the work area is neat, clean and tidy at both beginning and end of shift.
4	Standardise activities	4.1	Follow procedures.
		4.2	Follow checklists for activities, where available.
		4.3	Keep the work area to specified standard.

5	Sustain the 5S system	5.1	Clean up after completion of job and before commencing next job or end of shift.
		5.2	Identify situations where compliance to standards is unlikely and take actions specified in procedures.
		5.3	Inspect work area regularly for compliance to specified standard.
		5.4	Recommend improvements to lift the level of compliance in the workplace.
		5.5	Clean up after completion of job and before commencing next job or end of shift.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:	• lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE)

- takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.
- 5S includes all of:**
- sort
 - set in order
 - shine
 - standardise
 - sustain.
- Sort includes all of:**
- separating necessary from unnecessary items (equipment and supplies)
 - keeping only what is absolutely necessary for the work processes that comprise the job
 - disposing of (or relocating) all other items.
- Set in order includes all of:**
- assigning required equipment and materials appropriate locations in the work area
 - consideration of frequency of use, ergonomics and work health and safety (WHS)
 - provision of facilities to maintain the locations.
- Shine includes one or more of:**
- keeping the work area clean at all times which should be carried out to a regular daily schedule against allowed time, usually at the end of the day or of a particular process
 - keeping work area organised
 - noting any signs of wear, damage, leakage, safety risks or other issues that require immediate attention.
- Best location includes one or more of:**
- changes to the layout of furniture
 - arrangement of equipment
 - provision of services
 - location of personnel.
- Standardising includes one or**
- activities that help maintain the order and the housekeeping standards

- more of:**
- using procedures and checklists developed from a procedure.
- Sustain includes one or more of:**
- making sure that daily activities are completed every day regardless of circumstance
 - cleaning up after a job
 - undertaking inspections, including:
 - informal inspections carried out often, at least weekly
 - formal inspections carried out at least monthly
 - generating continuous improvement actions from daily activities
 - following up specific actions to generate continuous improvement.
- Items in work area include one or more of:**
- tools
 - jigs/fixtures
 - materials/components
 - plant and equipment
 - manuals
 - personal items (e.g. bags, lunch boxes and posters)
 - safety equipment and personal protective equipment (PPE)
 - other items which happen to be in the work area.
- Procedures (written, verbal, visual, computer based, etc.) include one or more of:**
- work instructions
 - standard operating procedures (SOPs)
 - safe work method statements
 - formulas/recipes
 - batch sheets
 - temporary instructions
 - any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402040A Apply 5S procedures

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402040 Apply 5S procedures

Modification History

Release 1. Supersedes and is equivalent to MSS402040A Apply 5S procedures

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, in one (1) or more allocated areas, to:

- implement and sustain 5S in own workplace
- identify own tasks and responsibilities
- contribute suggestions for improvement.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- purpose of 5S in the workplace
- meaning and application of 5S steps to own workplace and job
- principles of efficient workplace organisation
- identifying waste (muda)
- procedures for recommending improvements.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the application of 5S procedures in a work area where 5S has not previously been undertaken, or, demonstration of sustaining 5S principles in a work area that has already undergone prior 5S procedures
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.

- Assessment should occur in operational workplace situations. Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402050 Monitor process capability

Modification History

Release 1. Supersedes and is equivalent to MSS402050A Monitor process capability

Application

This unit of competency covers the skills and knowledge required for gathering of data and the interpretation of simple information to determine the compliance of the process and the taking of action as defined by the procedures where the information reveals the process is out of control parameters.

This unit applies to an individual in an organisation adopting specific competitive systems and practices, usually either six sigma or statistical process control/three sigma, as a means of determining and improving the capability of their process to customer requirements. The individual is involved in collecting specified data and performing specified manipulations to the data (typically by plotting on a chart or by entering into a nominated computer program). The information is typically presented to team members in terms of graphs/charts which they are expected to interpret at a basic level and then take action in accordance with procedures to restore the process to being under control parameters.

This unit requires the application of skills associated with entering and monitoring operational data and information and requires initiative, enterprise and problem solving in identifying production variations and making improvement recommendations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Collect and process data	1.1	Take specified measurements/readings/observations, as required.
		1.2	Enter data in log, computer or other record.
		1.3	Manipulate and/or chart data as required by procedures.
2	Identify variations that are not random and take action	2.1	Examine chart and/or reliability information.
		2.2	Distinguish between random variations and those with an identifiable cause.
		2.3	Take action specified in procedures when a variation with an identifiable cause occurs.
3	Assist in process improvement	3.1	Collect data for process capability improvement trials.
		3.2	Make recommendations for improvement.
		3.3	Implement revised capability monitoring procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems • lean operations

**and practices
include one or more
of:**

- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

**Procedures
(written, verbal,
visual, computer
based, etc.) include
one or any
combination of:**

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

**Process capability
includes one or
more of:**

- the capability of the process to deliver to customer defined requirements
- process stability against standardised practices and documentation to eliminate variation against customer requirements
- statistical capability to deliver product within a specified range
- a statistical technique to determine the range within which a product might be expected to fall.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402050A Monitor process capability

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402050 Monitor process capability

Modification History

Release 1. Supersedes and is equivalent to MSS402050A Monitor process capability

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to assist in one (1) or more process improvements and to routinely:

- collect and process data
- identify non-random variations and take the action specified in the procedures
- make recommendations for improvements.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- defects and defective product
- variation and the related statistical distribution
- control charting (or similar) methods
- analysis of information to identify trends or other non-random results
- determination of identifiable causes from variation information
- process capability determination from variation data.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include routine collection of data and identification of non-random variation in own workplace
 - must include participation in a process capability improvement project

- will typically include the use of appropriate statistical tools, aids and apps.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402051 Apply quality standards

Modification History

Release 1. Supersedes and is equivalent to MSS402051A Apply quality standards

Application

This unit of competency covers the skills and knowledge required to apply quality standards to work operations in an organisation. The unit is designed to complement competitive systems and practices units.

This unit applies to an individual who is expected to take responsibility for the quality of their own work, and to take actions specified in the procedures and within the scope of their job and authority to ensure that quality standards are met.

This unit requires the application of skills associated with interpreting and applying workplace standards and identifying and addressing problems that interfere with quality outcomes. The unit requires initiative, enterprise and self-management to ensure quality standards are achieved.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Assess own work	1.1 Continuously check completed work against workplace standards relevant to the operation being undertaken. 1.2 Demonstrate an understanding of how the work activities and completed work relate to the next production process or processes and to the final products or services concerned. 1.3 Identify and isolate faulty components, products or processes. 1.4 Record and/or report faults and any identified causes to the supervisor concerned, where required, in accordance with workplace procedures.
2	Assess quality of received components, parts or materials	2.1 Continuously measure/check received components, parts, materials, information, service or final products against workplace standards and specifications for conformance. 2.2 Demonstrate an understanding of how the received components, parts or materials, information or service relate to the current operation and how they contribute to the final quality of the product or service. 2.3 Identify and isolate faulty components, parts, materials or information that relate to the operator's work. 2.4 Record and/or report faults and any identified causes in accordance with workplace procedures. 2.5 Identify causes of any identified faults and take corrective action as specified in workplace procedures.
3	Investigate causes of quality deviations	3.1 Record information on quality and other indicators of process performance. 3.2 Investigate and report causes of deviations from specified quality standards for components. 3.3 Recommend suitable preventative action based on workplace quality standards and the identified causes of deviations from specified quality standards of materials.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Quality parameters include one or more of:

- finish
- size
- durability
- product or process variations
- materials
- alignment
- colour
- damage and imperfections

	• time • is complete/contains all required information/data • complies to template • uses the correct styles and formats.
Quality checks include one or more of:	• visual inspection • physical measurements • chemical tests • checks against patterns, templates, styles, formats and guides • processing time.
Materials include one or more of:	• physical raw materials • orders, forms and other documentation • services required for undertaking an operation (e.g. power, water, compressed air and fuel).
Procedures (written, verbal, visual, computer based, etc) include one or more of:	• work instructions • standard operating procedures (SOPs) • safe work method statements • formulas/recipes • batch sheets • temporary instructions • any similar instructions provided for the smooth running of the plant.
Indicators of production performance include one or more of:	• number of items/production rate • delays and causes of delays (where known) • other information as specified in the procedures.
Data entry/recording includes one or more of:	• keyboard • written (including ticks or signs) • verbal.
Sources of information/documents include one or more of:	• quality and Australian Standards and procedures • work instructions, patterns, designs and recipes • organisation work procedures • manufacturer instructions for materials and equipment • organisational or external personnel

- customer requirements.
- Investigate and report requires following set procedures which include one or more of:**
- verbal instructions
 - documented procedures
 - other quality procedures as implemented within an organisation or work environment.
- Workplace context includes one or more of:**
- work organisation procedures and practices relating to the manufacture and quality outcomes for products
 - conditions of service, legislation and industrial agreements, including:
 - workplace agreements and awards
 - federal or state/territory legislation
 - standard work practice.
- Reporting/communication includes one or more of:**
- verbal and written communication in accordance with organisational policies and procedures
 - oral, written or visual communication, including simple data.
- Being responsible for the maintenance of own work quality includes one or more of**
- contributing to the quality improvement of team or section output, where necessary, in accordance with workplace procedures
 - following safety, environmental, housekeeping and quality procedures as specified by materials/machine/equipment manufacturers, regulatory authorities and the organisation.
- Applicable regulations and legislation include one or more of**
- work health and safety (WHS) legislation relevant to workplace activities
 - workers compensation legislation.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402051A Apply quality standards

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402051 Apply quality standards

Modification History

Release 1. Supersedes and is equivalent to MSS402051A Apply quality standards

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more products/processes, to:

- check and measure relevant quality parameters
- interpret results of quality checks in terms of specifications, patterns and work standards
- take required action where standards of materials, component parts, final product or work processes are found to be unacceptable
- maintain accurate records.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- relevant quality standards, policies and procedures
- relevant production processes, materials and products
- relevant measurement techniques and quality checking procedures
- reporting procedures.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the application of quality standards to own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.

- Assessment should occur in operational workplace situations. Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402060 Use planning software systems in operations

Modification History

Release 1. Supersedes and is equivalent to MSS402060A Use planning software systems in operations

Application

This unit of competency covers the skills and knowledge required to access planning software (often known as Enterprise Resource Planning (ERP), Materials Resource Planning (MRP and MRPII), and often by a proprietary name, to make routine business decisions required of the person as a regular part of their job.

This unit applies to an individual in an organisation using a planning software system and who must interface with that system. The unit applies to both accessing information from the planning software system and using it as an aid to decision making. This unit requires the application of communication, planning, and problem solving associated with using planning software in own work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Use interface	1.1	Identify terminals relevant to own workstation and functions.

		1.2	Use keyboards, track ball/mouse and monitor and/or other peripherals to access system.
		1.3	Navigate through system and screens to find program menu and data relevant to own work.
		1.4	Identify and input information on own work processes at required frequency and to required detail.
		1.5	Access message section and acknowledge messages.
		1.6	Identify problems and make suggestions for improvements to relevance of planning software to own work.
2	Access information	2.1	Identify work processes that require information from planning software system.
		2.2	Obtain relevant data and information on current operations from the planning software system.
		2.3	Identify the status of items in the value stream.
		2.4	Access historical data and information.
		2.5	Interpret information and identify and prioritise any actions required in response to information.
3	Take action in accordance with procedures	3.1	Take action in response to information obtained from planning software.
		3.2	Follow up as appropriate to ensure anticipated results have occurred.
		3.3	Record adjustments and variations.
		3.4	Identify any learning needs to use planning software and seek appropriate support.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Relevant data and information includes one or more of

- technical and other drawings
- standard operating procedures (SOPs) and other work instructions
- production schedules, including historical data
- orders and order tracking information
- stock control
- contact lists
- work health and safety (WHS) information.

Stages where value stream actions may occur include one or

- sales outlet/representative
- information gathering, data analysis and research
- product design

more of:

- raw material sourcing
- intermediate processing
- final assembler/collation/preparation
- support services (e.g. accounting, finance and legal)
- storage and delivery to customer
- after market support.

Items in the value stream include one or more of:

- physical elements of the production system, such as sites, workstations, equipment and material, including stock, work in progress and finished products
- information needed to meet customer requirements, such as designs, drawings, work instructions, SOPs, standards, material lists and pricing
- information not directly related to current customer requirements but required by the organisation.

Procedures (written, verbal, visual, computer based, etc.) include one or more of:

- work instructions
- SOPs
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402060A Use planning software systems in operations

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402060 Use planning software systems in operations

Modification History

Release 1. Supersedes and is equivalent to MSS402060A Use planning software systems in operations

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for three (3) or more uses resulting in action from the information obtained, to:

- identify the scope and relevance of planning software system to own work
- enter and retrieve data, including normal performance and variations
- use planning software system to assist in own work
- contribute suggestions for improvement.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- planning software system and operation, including:
 - terminal locations and types
 - security and access arrangements
 - range of information held in planning software relevant to own work
 - data collection methods for operations in work area
 - assistance arrangements for users of planning software
 - business activities exercised by/through the planning software system
- procedures for recommending improvements.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace

- will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- must include the use of actual planning software in own workplace
- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations. Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402061 Use SCADA systems in operations

Modification History

Release 1. Supersedes and is equivalent to MSS402061A Use SCADA systems in operations

Application

This unit of competency covers the skills and knowledge required by an individual to interact with a System Control and Data Acquisition (SCADA) system as part of their job.

This unit applies to an individual in an organisation using a SCADA system and the individual must interface with that system. The individual will need to access this system as part of their routine and take actions based on the information they obtain from the SCADA system in accordance with procedures.

This unit requires the application of skills associated with using communication tools and technology for management of own work, planning and problem solving.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Use operator interface	1.1 Identify SCADA terminals relevant to own workstation and functions.

		1.2	Use keyboards, track ball, monitor and/or stand-alone controllers to access/interrogate system.
		1.3	Use correct level of access and find all relevant screens and information.
		1.4	Access message section and acknowledge messages.
		1.5	Input and output information correctly according to program and organisation requirements.
2	Use information	2.1	Obtain data and information from SCADA, as required, including process, supply and product chain data.
		2.2	Interpret data and information as required by own job.
		2.3	Find and use relevant historical data and information.
		2.4	Use manufacturer manuals or specifications, as required, to expand knowledge of SCADA system relevant to own work.
		2.5	Determine and prioritise required actions.
3	Make required changes in accordance with procedures	3.1	Adjust production/process in response to SCADA information.
		3.2	Record adjustments and variations to specifications/schedules and report to appropriate personnel.
		3.3	Seek feedback and information on adjustments to further improve procedures, where required.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Procedures (written, verbal, visual, computer based, etc.) include one or more of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402061A Use SCADA systems in operations

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402061 Use SCADA systems in operations

Modification History

Release 1. Supersedes and is equivalent to MSS402061A Use SCADA systems in operations

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for three (3) or more adjustments to production/process utilising SCADA information, to:

- identify scope and relevance of SCADA system to own work
- access correct levels of SCADA system
- enter and retrieve data, including normal performance and variations
- use SCADA system to assist in own work.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- hierarchy of SCADA system and operation
- available information from, and controls exercised by, SCADA system.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include use of SCADA systems in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).

- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402080 Undertake root cause analysis

Modification History

Release 1. Supersedes and is equivalent to MSS402080A Undertake root cause analysis

Application

This unit of competency covers the skills and knowledge required to undertake root cause analysis (RCA). This unit also covers the competencies needed by operators to contribute to an advanced maintenance strategy using RCA coupled with diagrams and charts.

This unit applies to individuals working in an organisation that is applying competitive systems and practices strategies. The unit applies to the formal problem solving to root cause that the individual must undertake in their own work area or where the individual contributes to problem solving to root cause as part of a team.

This unit requires an ability to seek and apply information from a variety of sources in order to inform RCAs. Initiative and enterprise is also required to identify quick fix and permanent solutions to problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Recognise problems	1.1	Identify features or occurrences indicative of a problem.
		1.2	Use appropriate tools, techniques and charts to define the problem.
2	Implement quick fix	2.1	Recommend a quick fix within the scope of competency and authority.
		2.2	Use technology or processes relevant to the problem to implement quick fix.
3	Determine root cause	3.1	Identify a range of possible causes.
		3.2	Gather data and other information to eliminate or confirm possible causes.
		3.3	Use available data and information to link causes and effects.
		3.4	Seek assistance to obtain additional information if problem is beyond own competency/authority.
		3.5	Identify root cause.
4	Develop permanent solution	4.1	Identify a range of methods to eliminate the root cause or break the cause tree.
		4.2	Select the most appropriate solution.
		4.3	Liaise with relevant people.
		4.4	Recommend or implement solution within the limits of competency and authority.
		4.5	Monitor impact of solution and make further recommendations, as required.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:	• lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree.
Problems include one or more of:	• variation to normal plant or equipment operation • unplanned or non-conforming process or operations outcomes • out of specification products • excess scrap • accidents and emergencies • regulatory breaches • customer returns and complaints • reduction or loss of sales.
Techniques/charts include one or more	• control charts • Pareto charts

of:

- run charts
- flow charts
- cause and effect diagrams
- tree diagrams
- 5 Whys analysis
- organisation specified/mandated methods.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402080A Undertake root cause analysis

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402080 Undertake root cause analysis

Modification History

Release 1. Supersedes and is equivalent to MSS402080A Undertake root cause analysis

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more problems, to:

- undertake problem identification
- use appropriate processes to achieve root cause identification
- recommend solutions and implementation procedures to problems within own area
- monitor implementation of solutions.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- methodology of root cause analysis, including:
 - difference between quick fix and root cause elimination
 - breaking of causal tree
- indicators of problems and variances to normal operation
- relevant analysis tools (e.g. Pareto charts, 5 Whys).

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include a root cause analysis in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.

- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS402081 Contribute to the application of a proactive maintenance strategy

Modification History

Release 1. Supersedes and is equivalent to MSS402081A Contribute to the application of a proactive maintenance strategy

Application

This unit of competency covers the skills and knowledge required by an individual to make a positive contribution to proactive maintenance strategies, including actions that contribute to equipment uptime and overall equipment effectiveness (OEE). This unit applies in an organisation which is following a predictive, preventative or reliability-centred maintenance strategy and which requires commitment from all employees. The employee should 'own' their equipment/plant and take an active part in the implementation of the strategy within the scope of their authority.

This unit requires the application of skills associated with accessing and maintaining equipment/plant documentation. It also requires problem solving, initiative and enterprise to continually monitor and maintain operational performance of equipment/plant used in work role.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1	Maintain equipment/plant	1.1	Keep equipment/plant within area of responsibility clean.
		1.2	Ensure equipment/plant is serviced and adjusted, as required, in accordance with procedures and own level of responsibility.
		1.3	Access manufacturer manuals and specifications, where required, to expand knowledge on the maintenance of equipment/plant.
		1.4	Access and update documentation on equipment/plant operation and maintenance in accordance with workplace procedures.
2	Monitor operation of equipment/plant	2.1	Regularly check key conditions of the equipment/plant as defined in workplace procedures.
		2.2	Regularly check equipment/plant OEE.
		2.3	Note any deviation from conditions specified in procedures.
3	Identify deviations and patterns	3.1	Identify any previous occurrences of a deviation.
		3.2	Identify any related deviations which have occurred.
		3.3	Identify any unusual occurrence which may be related to a deviation.
4	Take action appropriate to competency and authority on deviation	4.1	Liaise with relevant people regarding the deviation and the solution.
		4.2	Implement solution and/or assist with the implementation of the solution, as appropriate.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- OEE
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Uptime includes one or more of:

- the overall availability of the plant
- the inverse of downtime or the unavailability of the plant
- the fraction, percentage or time the plant is available for production.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions

- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS402081A Contribute to the application of a proactive maintenance strategy

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS402081 Contribute to the application of a proactive maintenance strategy

Modification History

Release 1. Supersedes and is equivalent to MSS402081A Contribute to the application of a proactive maintenance strategy

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include the ability to monitor equipment/plant in one (1) or more areas, and to:

- maintain the equipment/plant to the required standard
- identify deviations in OEE requiring action
- take the action required by the procedures.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role under routine only supervision, including:

- interpretation of trends or other non-random variation
- determining OEE (availability x performance x quality rate) and uptime metrics
- principles of operation of plant/equipment and factors likely to cause deviations in performance
- identifying deviations requiring action
- appropriate actions for dealing with deviations.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the application of proactive maintenance in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.

- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403001 Review competitive systems and practices

Modification History

Release 1. Supersedes and is equivalent to MSS403001A Implement competitive systems and practices

Application

This unit of competency covers the skills and knowledge required by an individual to review competitive systems and practices in their own work in a way that integrates with others in the team or work area who are also implementing competitive systems and practices. The unit focuses on the holistic application of competitive systems and practices to achieve improved performance in own work and in activities with others in the team or work area that contribute to improving customer benefit. Depending on the operations or processes in the team or work area the unit may also include interaction with other teams and work areas.

The unit is suitable for individuals who have formal responsibility for the work of others, such as team leaders. It is also suitable for individuals, such as technicians and tradespeople, who must integrate the application of their technical skills with the implementation of competitive systems and practices in an organisation.

The unit applies to the areas of cost, quality, delivery, safety/environment, and employee capability, including continuous reviewing of performance against these five areas in liaison with other relevant people. Improvement initiatives in these five areas are usually developed and implemented with the support of technical support staff. Whereas other units may emphasise the competence to use one or more competitive practices, this unit emphasises the ability to advance on all five key areas over a moderate time period.

This unit requires the application of skills associated with problem solving and initiative and enterprise in order to identify opportunities to make improvements and maximise performance. Communication, the ability to work in a team and planning and organising skills are required to implement improvements and address any conflicts that arise. This unit also requires an ability to identify appropriate technology, and to consider and integrate feedback on how personal performance can be improved.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Contribute to the improvement of the operations system in team or work area	1.1	Identify key performance indicators (KPIs) for area of operations.
		1.2	Review competitive systems and practices to improve health, safety and environment (HSE) performance of self and others.
		1.3	Review competitive systems and practices to maximise quality consistency.
		1.4	Review competitive systems and practices and identify any skill and training issues that need to be addressed to improve capability of self and others.
		1.5	Review competitive systems and practices to maximise customer benefit/cost ratio.
		1.6	Review competitive systems and practices to reduce lead time to delivery within the scope of authority and responsibility.
		1.7	Work with relevant stakeholders to resolve conflicts which arise from implementation of competitive systems and practices.
		1.8	Select improvements which will deliver the greatest overall benefit for the resources required/available without reducing current performance on individual factors.
2	Implement improvements	2.1	Implement the chosen improvement/s.
		2.2	Check the selected improvements improve the system as

a whole and do not result in unintended consequences.

- 2.3 Monitor implementation and make adjustments, as required.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - JIT, kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Customer includes one or more of:**
- internal customers
 - external customers

- final customer.
- Supplier includes one or more of:**
- internal supplier
 - external supplier
 - ultimate source of inputs (e.g. raw materials) to the process.
- Muda (waste) includes all of:**
- any activity which does not contribute to customer perceived benefit/features
 - excess production and early production
 - delays
 - movement and transport
 - poor process design
 - inventory
 - inefficient performance of a process
 - making defective items
 - other activities which do not yield any benefit to the organisation or any benefit to the organisations customers.
- Operations includes all of:**
- process
 - plant and equipment
 - procedures and practices
 - skills and work organisation of the workforce
 - other components which make up the productive organisation.
- Implement improvements within one or more of:**
- own job role
 - processes and operations in the work area or team.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403001A Implement competitive systems and practices

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403001 Review competitive systems and practices

Modification History

Release 1. Supersedes and is equivalent to MSS403001A Implement competitive systems and practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to contribute to and implement improvements on one (1) or more occasions and to improve performance in:

- cost
- quality
- delivery
- safety/environment
- employee capability.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- techniques for monitoring cost, quality, delivery, safety/ environment and employee capability
- muda (waste)
- kaizen (continuous improvement)
- key performance indicators (KPIs), their use and problems
- cost components of products (goods or services)
- techniques for identifying and improving employee capability.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.

- Assessment should use a real project in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403002 Ensure process improvements are sustained

Modification History

Release 1. Supersedes and is equivalent to MSS403002A Ensure process improvements are sustained

Application

This unit of competency covers the skills and knowledge required to ensure that the gains which have been made by using improved methods, processes and/or equipment are sustained as the new baseline/standard for an area of work and so prevent regression to former practices, or digression to less efficient practices.

This unit applies to individuals working in a team or work area who have already implemented competitive systems and practices related improvements in their own work and who must work effectively with others implementing competitive systems and practices to ensure that performance improvement gains are sustained.

The unit is also suitable for individuals who have formal or informal responsibility for the work of others, such as team leaders; individuals, such as senior operators, who must mentor others; or individuals, such as technicians and tradespeople, who must integrate the application of their technical skills with the implementation of competitive systems and practices in an organisation.

The unit can be applied to all areas of an organisation, including production, maintenance, logistics and office functions.

The unit covers the implementation of practices to ensure that process improvements are sustained and opportunities taken to suggest further improvements.

Improvement initiatives can be made by any number of methods by teams or individuals. The unit assumes that desired levels of performance or quality are known.

This unit requires the application of skills associated with problem solving, initiative and enterprise, and planning and organising in order to check and monitor the impacts of change. It also requires communication and the ability to work with others to assess the impact of change in own work and on other's work, as well as self-management and learning to adapt improvements according to new information and feedback.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Examine previous improvements	1.1	Identify impact of previous process improvements to systems, equipment, operations or products in work area.
		1.2	Identify improvements that have not met objectives.
2	Ensure corrective actions are implemented	2.1	Identify corrective actions that can be taken on process improvements that have not met objectives.
		2.2	Liaise with relevant people associated with the anticipated corrective action.
		2.3	Obtain any required approvals.
		2.4	Arrange for the supply of resources.
		2.5	Check impacts of corrective action on work health and safety (WHS), quality and environmental systems in work area and take action in accordance with procedures.
		2.6	Check that self and others in team or work area have required skills for corrective actions.
		2.7	Monitor implementation of corrective action.

		2.8	Make required adjustments.
3	Verify systems support improvement	3.1	Verify procedures reflect improvements.
		3.2	Check that training and assessment activities in team or work area reflect improvements.
		3.3	Liaise with relevant people to ensure their support of the new or modified system/s.
4	Audit the change	4.1	Determine an appropriate audit period/cycle.
		4.2	Agree relevant measures/indicators for the improvement.
		4.3	Measure performance at agreed times using agreed measures.
		4.4	Investigate causes of under-performance.
		4.5	Take appropriate corrective action to improve performance.
		4.6	Re-audit the improvement on an agreed basis.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices

- lean operations
- agile operations

- include one or more of:**
- preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- A change aimed at reducing muda (waste) will be an improvement in one or more of:**
- systems/processes
 - equipment
 - operations/practices
 - products.

- Customers include one or more of:**
- internal customers
 - external customers
 - final customers.

- Suppliers include one or more of:**
- internal suppliers
 - external suppliers
 - ultimate source of process inputs(e.g. raw materials).

- Systems include all of:**
- equipment/plant
 - systems/processes
 - procedures and work practices.

- Resources include all of:**
- equipment
 - modifications
 - consumables
 - people

- suitable work area
- time
- money (expense/capital).

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Techniques for sustaining improvements include one or more of:

- techniques for preventing mistakes by designing the operations process, equipment and tools so that an operation cannot be performed incorrectly (e.g. baka-yoke)
- techniques that generate warning signals where a mistake is about to be performed (poka-yoke)
- use of technology so that it is impossible to do the job any other way
- changes to process or procedures or other changes to the operations system which, if followed, will sustain the change.

Measuring performance includes one or more of:

- personally taking measurements
- arranging for measurements to be taken/made by appropriate personnel.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403002A Ensure process improvements are sustained

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403002 Ensure process improvements are sustained

Modification History

Release 1. Supersedes and is equivalent to MSS403002A Ensure process improvements are sustained

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, on two (2) or more occasions to:

- identify previous improvements that have not met objectives
- identify action which will correct this without adverse impact on other areas
- audit and validate the improvement from the change.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- muda and its causes
- processes and procedures for the organisation relevant to the work area
- poka yoke, baka yoke and similar sustaining approaches
- measures of performance relevant to the work area and the improvement.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should analyse real process improvements in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).

- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403005 Facilitate use of a Balanced Scorecard for performance improvement

Modification History

Release 1. Supersedes and is equivalent to MSS403005A Facilitate use of a Balanced Scorecard for performance improvement

Application

This unit of competency applies in organisations using a Balanced Scorecard approach to performance improvement. In these organisations the unit applies to individuals in a team or workgroup who facilitate the use of the Balanced Scorecard through leading, assisting and/or motivating others in using the Balance Scorecard approach.

This unit requires the application of skills associated with communication, teamwork, problem solving, initiative, enterprise, and planning and organising in order to provide leadership in the interpretation, review and strategic response to Balanced Scorecard results.

This unit has a strong emphasis on identifying and reviewing required performance measures and requires an ability to use new information to improve performance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.	demonstrate achievement of the element.
1 Interpret Balanced Scorecard results	1.1 Identify patterns of performance shown on strategy map.
	1.2 Identify actions indicated by Balanced Scorecard results.
	1.3 Discuss results with fellow employees and other relevant stakeholders.
	1.4 Facilitate the selection of required actions with employees and other stakeholders.
	1.5 Facilitate the development of implementation plans for team or individuals.
	1.6 Facilitate the implementation of required actions from developed plans.
	1.7 Follow up on implementation to ensure it occurs as planned.
2 Review key performance indicators (KPIs) in the Balanced Scorecard for the organisation and work area	2.1 Relate area and other KPIs to strategy map/strategic objective.
	2.2 Review the actions required by self and others to meet each KPI.
	2.3 Compare current actions to the optimal actions to achieve strategy.
	2.4 Discuss with employees and other stakeholders any modifications to KPIs which will better meet strategy.
	2.5 Recommend amendments to KPIs to relevant personnel.
3 Review reporting systems for Balanced Scorecard information	3.1 Review reporting systems to ensure information needed by self, other employees in area and organisation is available.
	3.2 Review the mix of operational and strategic information to ensure it is appropriate for work area.
	3.3 Review information provided for relevance and currency, and that it is meaningful and not excessive.
	3.4 Recommend improvements to reports and reporting

system, as appropriate.

4	Lead improvement to work area total performance	4.1	Compare actual performance of teams, work areas or individuals with desired total performance using KPIs and other Balanced Scorecard information.
		4.2	Discuss with team ways of improving total performance.
		4.3	Lead processes for improvement in total performance.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems ,including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving

- run charts
 - standard procedures
 - current reality tree.
- Team includes one or more of:**
- all individuals in the target work area who are involved in the implementation and use of the Balanced Scorecard
 - formally designated team working to a team leader
 - informal or *ad hoc* team/group of people.
- Balanced Scorecard includes all of:**
- an organisation's vision and strategy
 - establishing and measuring enterprise activity in a number of different financial and non-financial perspectives
 - use of KPIs related to an overall strategy map
 - use of metrics for KPI components, such as customer, environmental, internal business process and learning and growth.
- KPIs include all of:**
- financial performance measures
 - non-financial performance measures against targets
 - other performance indicators relevant for informing the teams activities (e.g. performance indicators for other areas or sections, suppliers or customers).
- Actions include one or more of:**
- corrective action for poor results
 - confirming action for acceptable results
 - taking steps to ensure actions for good results are consistently maintained
 - changes to performance indicators or performance measurement.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403005A Facilitate use of a Balanced Scorecard for performance improvement

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403005 Facilitate use of a Balanced Scorecard for performance improvement

Modification History

Release 1. Supersedes and is equivalent to MSS403005A Facilitate use of a Balanced Scorecard for performance improvement

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to review Balanced Scorecard use on two (2) or more occasions and to:

- interpret Balanced Scorecard results
- review key performance indicators (KPIs)
- review reporting
- use this to help improve total performance.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- components of the Balanced Scorecard, including perspectives, feedback loops, targets and metrics, and reporting systems
- analysis of Balanced Scorecard information
- uses and limitations of KPIs and the alignment of KPIs with the organisations strategy map
- how to identify areas for improvement from Balanced Scorecard information.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - single projects which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403010 Facilitate change in an organisation implementing competitive systems and practices

Modification History

Release 1. Supersedes and is equivalent to MSS403010A Facilitate change in an organisation implementing competitive systems and practices

Application

This unit of competency covers the skills and knowledge required by individuals responsible for facilitating change processes in an organisation implementing competitive operational practices.

This unit applies to individuals who facilitate the change process resulting from implementing one or more competitive systems or practices. This implementation may also be associated with other changes, such as the introduction of new products, processes or equipment. The unit will usually apply to individuals whose responsibility is at the team, area or section level rather than the whole organisation. The responsibility may be formally designated or be informal, as in mentoring and assisting fellow employees.

This unit assumes that consultation and agreement on the implementation of the competitive systems and practices and other associated changes has already occurred and the nature and extent of the change has been agreed.

This unit does not cover the negotiation of change in a formal industrial relations sense but does cover the skills needed to identify real or potential change implementation issues, including those that may need to be referred to formal consultation and/or dispute settlement procedures.

This unit has a strong emphasis on planning, encouraging and facilitating in a changing environment within the organisation, including using appropriate communication, teamwork, problem solving, initiative and self-management.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Define nature and impact of change for designated area and processes	1.1	Identify the organisation's aims and objectives for the competitive systems and practices techniques related to the change process.
		1.2	Identify opportunities for implementation of change within work area.
		1.3	Determine impacts of change for work area, including potential benefits and impacts on own work and work of fellow employees.
2	Identify key performance indicators (KPIs)	2.1	Liaise, where required, with managers, engineers and other staff responsible for designing and/or implementing change.
		2.2	Identify KPIs for own work responsibility and that of the work area.
		2.3	Communicate KPIs to fellow employees.
		2.4	Check that data collection and processing are appropriate for KPIs.
		2.5	Raise and resolve issues related to KPIs with relevant personnel.
3	Liaise with key stakeholders	3.1	Identify key stakeholders impacted by the change.
		3.2	Communicate with key stakeholders within scope of authority.

		3.3	Identify and address issues and concerns of each stakeholder if within scope of authority.
		3.4	Develop and/or locate information required to address key concerns.
		3.5	Refer issues and concerns outside of scope of authority to appropriate personnel.
4	Develop a strategy to help implement change	4.1	Identify or develop a work plan for implementing change.
		4.2	Make information required to support change available to team members.
		4.3	Communicate/circulate draft work plan to other employees in work area, supervisors, technical experts and other appropriate personnel for comment.
		4.4	Assess suggested changes and incorporate into work plan, where appropriate.
5	Implement change	5.1	Obtain authorisation to commence change implementation in accordance with organisation procedures.
		5.2	Implement change in accordance with work plan and organisational work health and safety (WHS) and consultation procedures.
6	Monitor implementation of change	6.1	Maintain open communication channels with all stakeholders during implementation.
		6.2	Monitor KPIs during implementation.
		6.3	Encourage and facilitate improvement suggestions of team members.
		6.4	Identify areas requiring improvement in change implementation.
		6.5	Make improvements to implementation according to organisation procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Work plan for change includes one or more of:

- timetables
- KPIs
- training needs
- WHS implications
- contingency plans

- responsibilities with team members and senior managers, engineers and other staff responsible for designing and/or implementing change.

Issues and concerns include one or more of:

- individual and group concerns
- those expressed by and through industrial processes.

Gathering and monitoring performance data includes one or more of:

- manually by individual employees through charts, tally sheets or keypad/board entry
- automatically through software, such as SCADA software, ERP systems, MRP and proprietary systems.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403010A Facilitate change in an organisation implementing competitive systems and practices

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403010 Facilitate change in an organisation implementing competitive systems and practices

Modification History

Release 1. Supersedes and is equivalent to MSS403010A Facilitate change in an organisation implementing competitive systems and practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more changes, to:

- identify competitive systems and practices in own workplace
- identify changes to own work and work area flowing from implementation of relevant competitive systems and practices
- consult with stakeholders regarding changes and issues
- develop a strategy to implement required changes
- make suggestions for improvements.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- features of competitive operational practices in own work area
- health, safety and environment (HSE) principles and requirements for area of responsibility
- change implementation procedures
- planning and implementation strategies
- employee assistance mechanisms within organisation.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency

- must include facilitating change in relation to the implementation of competitive operational practices in own work area
- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
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MSS403011 Facilitate implementation of competitive systems and practices

Modification History

Release 1. Supersedes and is equivalent to MSS403011A Facilitate implementation of competitive systems and practices

Application

This unit of competency covers the skills and knowledge required by individuals who facilitate, lead or mentor others in competitive systems and practices implementation in a work area.

This unit applies to people responsible for facilitating others in implementing competitive systems and practices in their work. It may apply to formally designated team leaders or people given special roles in the implementation process that go beyond their own work and which involve guiding, facilitating or mentoring others. The unit applies to competitive systems and practices implementation activities at the work area or section level.

The unit requires an individual to integrate a range of competitive systems and practices knowledge and skills as part of their role. The unit covers assisting others to understand and apply a holistic view of their job and their role within an organisation, including the objectives that must be met as part of competitive systems and practices used by the organisation.

This unit requires the application of skills associated with communication, teamwork, problem solving, initiative and enterprise, planning and organising, and self-management. This unit has a strong emphasis on planning and implementation, and also requires an ability to learn from experience and feed new information back into strategies to improve own performance and that of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Facilitate the development of process and competitive systems and practices knowledge	1.1	Ensure necessary technical documentation and information about the process and competitive systems and practices is available.
		1.2	Assist and mentor others in accessing information.
		1.3	Identify work activities which may inhibit the ongoing development of competitive systems and practices skills and knowledge of others.
		1.4	Arrange for the provision of workforce development and training for self and others, as appropriate.
		1.5	Encourage others to apply technical knowledge to the improvement process.
2	Facilitate commitment to efficiency improvements	2.1	Ensure budgets, operating procedures and other related documentation is available.
		2.2	Assist others to apply this information to their work responsibilities.
		2.3	Encourage the identification of waste.
		2.4	Encourage an environment where efficiency improvements are recommended by fellow employees.
3	Encourage a competitive systems and	3.1	Encourage and, where necessary, develop communications between specialists and work group members.

4	practices approach to work	3.2	Lead development of strategies to monitor and deal with identified waste issues.
		3.3	Resource and encourage other employees to identify and take action on potential problems.
		3.4	Arrange for workforce development and training for self and others, as required, in relevant competitive systems and practice procedures and techniques.
		3.5	Guide others in relating identified problems to the maintenance strategy, and developing any required changes, to ensure awareness, learning and commitment.
	Implement process and organisation improvements	4.1	Plan the implementation of work group suggestions and externally suggested improvements.
		4.2	Facilitate commitment to, and involvement in, the implementation planning of improvements and to follow improvements to their conclusion.
		4.3	Encourage the application of the 'plan, do, measure, improve, control' approach to the job.
		4.4	Arrange for workforce development and training, as required, to facilitate continued involvement by others in improvement processes.
		4.5	Involve work group and other key personnel in identification of skill needs and means of skills acquisition to fill any identified gaps.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect

performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Budgets include one or more of:

- financial
- time
- materials/products
- other business plans which are relevant to the team and the work area.

Categories of waste include one or more of:

- excess production and early production
- delays
- movement and transport
- poor process design
- inventory
- inefficient performance of a process
- making defective items
- activities which do not yield any benefit to the organisation or any benefit to the organisations customers.

Key reliability issues

- cleanliness

- include one or more of:**
- poor lubrication
 - incorrect adjustment
 - poor training and instructions for employees.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403011A Facilitate implementation of competitive systems and practices

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403011 Facilitate implementation of competitive systems and practices

Modification History

Release 1. Supersedes and is equivalent to MSS403011A Facilitate implementation of competitive systems and practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for three (3) or more organisation improvements which include the facilitation of competitive systems and practices, to:

- identify processes and products of the organisation and work area
- analyse future skill development needs of work group
- mentor effectively in a one-on-one situation
- facilitate communication between work group and external competitive systems and practices specialists and managers
- lead work group in identifying efficiency improvements and elimination of waste.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- information technology systems used in the organisation
- features of competitive operational practices in own work area
- monitoring and data gathering systems in work area (e.g. SCADA, ERP and MRP)
- methods of gathering data against key performance indicators (KPIs)
- facilitation techniques to encourage work group development and improvement.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency

- must include facilitation of competitive systems and practices implementation in own workplace
- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403013 Lead team culture improvement

Modification History

Release 1. Supersedes and is equivalent to MSS403013A Lead team culture improvement

Application

This unit of competency covers the skills and knowledge required by a team leader or other person responsible for developing a culture within a team appropriate for supporting competitive systems and practices.

This unit applies where an organisation has embarked on competitive systems and practices and a team leader or other responsible person is required to change or improve the team culture to maximise the benefits from competitive systems and practices.

This unit requires the application of skills associated with communication, teamwork, problem solving, initiative and enterprise, planning and organising, and self-management in order to provide leadership in a changing team environment. This unit has a strong emphasis on planning and change management, but also requires an ability to learn from experience and feed new information back into strategies to improve performance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Facilitate the team's understanding of the competitive systems and practices strategy	1.1	Communicate with all team members the objectives and benefits of the competitive systems and practices strategy.
		1.2	Review with team members the techniques and methods that will be used in achieving the competitive systems and practices strategy.
		1.3	Using a systems approach, help team members understand how the team fits into the organisation.
		1.4	Establish appropriate communication and teamwork within the team and with other teams.
		1.5	Develop a work structure with the team that allows for everyone to participate in the application of the competitive systems and practices strategy.
2	Facilitate application of knowledge about the importance of controlling variation in competitive systems and practices	2.1	Develop the application of a statistical approach by all team members to all relevant facets of the system with a view to reducing variation.
		2.2	Encourage the approach of building quality and ensuring team members assist each other in meeting requirements.
3	Facilitate the development of skills and knowledge within the team	3.1	Encourage appropriate training for all team members.
		3.2	Involve team members in identification of skill needs and skill gaps, and in development of a strategy for training, skills acquisition and self-improvement so as to ensure awareness, learning and commitment.
4	Facilitate the development of commitment within the team to the competitive systems and practices strategy	4.1	Ensure that the team has sufficient resources and adequate equipment available to meet the requirements of the competitive systems and practices strategy.
		4.2	Encourage the adoption of continuous improvement.
		4.3	Encourage employee acceptance of responsibility for the quality of own work.

- 4.4 Provide continuous feedback and communication of progress at all levels in implementing the strategy.
- 4.5 Involve team members in relating identified problems and opportunities for improvement to the competitive systems and practices strategy, and involve them in developing any required changes, to ensure awareness, learning and commitment.
- 4.6 Establish and monitor indicators of team culture.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving

- run charts
- standard procedures
- current reality tree.

Systems approach includes consideration of the role and requirements of one or more of:

- customers
- suppliers
- employees
- other value stream members
- members of the public and community groups
- other external individual, group or organisation
- technical processes and equipment
- statutory and regulatory requirements, including work health and safety (WHS) and environment legislation and regulations
- quality standards.

Team culture can be monitored by one or more of:

- surveys
- evaluation of toolbox or other regular meetings
- direct discussion with team members
- monitoring of other indicators (e.g. error rates and absenteeism)
- analysis of root cause related to status of team culture.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403013A Lead team culture improvement

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403013 Lead team culture improvement

Modification History

Release 1. Supersedes and is equivalent to MSS403013A Lead team culture improvement

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more team culture changes, to:

- identify the competitive systems and practices used by the team
- identify changes to the work of the team flowing from the implementation of the relevant competitive systems and practices
- facilitate and monitor changes designed to improve team culture
- communicate effectively with team members providing relevant feedback.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- features of competitive operational practices in the team's work area
- principles of change management
- facilitation techniques to encourage team development and improvement.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).

- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403021 Facilitate a Just in Time system

Modification History

Release 1. Supersedes and is equivalent to MSS403021A Facilitate a Just in Time system

Application

This unit of competency covers the skills and knowledge required to facilitate the implementation/operation of a Just in Time (JIT)/kanban system in a team or work area.

This unit applies to a person who needs to monitor the operation of a JIT system and facilitate its working in a team or work area. This will involve liaison with stakeholders as well as examining the data generated and being alert to potential problems and areas for improvement.

This unit requires the application of skills associated with gathering, analysing and communicating information to facilitate implementation of the JIT system. It requires planning and organising skills and has a strong emphasis on communication and teamwork skills to ensure the JIT system is being effectively implemented. This unit also requires the ability to problem solve and take the initiative to consider performance issues and learn from experience to improve future performance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.	demonstrate achievement of the element.
1 Monitor the operation of the JIT system	1.1 Track value of key measures. 1.2 Recognise indicators of poor performance. 1.3 Take appropriate quick fix action.
2 Liaise with relevant stakeholders	2.1 Regularly communicate with team or work group members regarding the operation of the JIT system. 2.2 Review JIT key performance indicators (KPIs) with team or work group members. 2.3 Communicate with relevant personnel up and down the value stream regarding the operation of the JIT system. 2.4 Identify issues with stakeholders and take appropriate quick fix action.
3 Improve the JIT system	3.1 Identify areas requiring improvement in the JIT system. 3.2 Identify root cause of JIT-related problems. 3.3 Review value of key measures. 3.4 Recognise skill gaps in team members and other stakeholders. 3.5 Determine any other issues in team or work group, other stakeholders and JIT system leading to poor performance indicators. 3.6 Develop appropriate improvement solutions. 3.7 Liaise with relevant people regarding improvement solutions. 3.8 Implement and/or assist with the implementation of the solutions.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Key measures include one or more of:**
- inventory levels
 - lead time
 - In Full, On Time and In Specification (IFOTIS) delivery
 - productivity/production rate
 - other measures of pull through the value stream
 - quality.

- Stages where value stream actions can occur include one or more of**
- sales outlet/representative
 - information gathering, data analysis and research
 - product design
 - raw material sourcing
 - intermediate processing
 - final assembler/collation/preparation
 - support services (e.g. accounting, finance and legal)
 - storage and delivery to customer
 - after market support.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403021A Facilitate a Just in Time system

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403021 Facilitate a Just in Time system

Modification History

Release 1. Supersedes and is equivalent to MSS403021A Facilitate a Just in Time system

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for three (3) or more JIT related improvements, to:

- identify the JIT system and practices used in own work area
- identify and monitor JIT key measures
- solve JIT-related problems to root cause
- communicate effectively with stakeholders
- facilitate and monitor JIT-related changes to operations and practices.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- JIT methods relevant to own work area
- production data generated by the process and its application to JIT
- methods of gathering data against key performance indicators (KPIs)
- facilitation techniques to encourage work group development and improvement.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include facilitating the implementation of a Just in Time (JIT) system in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.

- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403023 Monitor a levelled pull system of operations

Modification History

Release 1. Supersedes and is equivalent to MSS403023A Monitor a levelled pull system of operations

Application

This unit of competency covers the skills and knowledge required to monitor the operation of a pull system in a work area and recommend improvements.

This unit covers the skills needed to monitor a pull operations system in a work area or team operation although knowledge of the overall pull system in the enterprise is also required. The unit is targeted at individuals, such as team leaders and senior operators, who have an overview of the work area or team operation and the ability to implement corrective action in the event of discrepancies.

The unit covers the skills needed to monitor daily working of the system, identify problems and take action on problems. The operations system may be a total demand pull system or it may be a mixed push/pull system.

This unit primarily requires the application of skills associated with using information and problem solving skills to monitor pull system and analyse discrepancies. It also requires skills in initiative and enterprise, and planning and organising to determine and act on opportunities for improvement. Aspects of self-management and learning are required to ensure own ability to improve systems.

The unit is based on manufacturing principles but can be contextualised for other types of organisations.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Monitor the pull system	1.1	Identify the pacemaker process.
		1.2	Identify rate of production set by the pull system.
		1.3	Determine actual rate of production at key parts of the process.
		1.4	Identify types of inventories within process.
		1.5	Compare actual inventories with planned inventories.
		1.6	Note discrepancies between actual and planned rates and inventories.
2	Take corrective action	2.1	Determine causes of discrepancies.
		2.2	Determine action required to rectify causes of discrepancies.
		2.3	Take action in conjunction with relevant stakeholders.
3	Test/improve the pull system	3.1	Identify recurrent discrepancies.
		3.2	Determine causes of discrepancies.
		3.3	Determine action required to rectify cause.
		3.4	Identify unnecessary levels of inventories.
		3.5	Discuss impacts of reduced inventories with relevant stakeholders.
		3.6	Take/initiate action to rectify recurrent discrepancies/reduce levels of unnecessary inventory.

3.7 Monitor the system to determine the effects of changes.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.
- Pull system includes one or more of:**
- operations done to order and not for holding large inventories of parts and completed stock
 - work flow done according to demand pull from the next work

- stage
 - operations in response to customer demand.
- Production used in a manufacturing sense includes one or more of:**
 - repetitive production of items (e.g. components and whitegoods)
 - continuous or batch production (e.g. hydrocarbons, chemicals and cement).
- Types of inventories include one or more of:**
 - cycle stock which reflects the replenishment quantity and frequency
 - buffer stock to meet demand variability and forecast errors
 - safety stock required to guard against quality and delivery failures upstream.
- Determine cause for an individual/team leader includes one or more of:**
 - analysing cause themselves
 - identifying that expert analysis is required and requesting this analysis
 - setting up an improvement team to analyse cause
 - identifying that the cause of the discrepancy is upstream or downstream of the team or area.
- Stakeholders include one or more of:**
 - managers
 - supervisors
 - employees
 - shareholders
 - work health and safety (WHS) mechanisms/representatives
 - industrial relations mechanisms/representatives
 - suppliers
 - customers
 - service providers.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403023A Monitor a levelled pull system of operations

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403023 Monitor a levelled pull system of operations

Modification History

Release 1. Supersedes and is equivalent to MSS403023A Monitor a levelled pull system of operations

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for three (3) or more monitored discrepancies/problems, to:

- identify the demand pull system used in own work area
- identify pacemaker process
- identify types of inventories used by team or work area
- determine actions to rectify discrepancies between actual and planned rates of production
- facilitate and monitor changes to rectify discrepancies.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- operation and capabilities of equipment used in own work area
- abilities and skills of personnel in work area
- ultimate customer order process and relationship to demand pull for team or work area
- inventories held by enterprise
- stakeholders relevant to team or work area
- possible actions available to address discrepancies

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include monitoring the operation of a pull system in own workplace

- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403030 Improve cost factors in work practices

Modification History

Release 1. Supersedes and is equivalent to MSS403030A Improve cost factors in work practices

Application

This unit of competency covers the skills and knowledge required by an individual to evaluate the product or process outcomes of a team or work group in terms of their cost components and to be able to determine, in general terms, the cost impacts of alternative actions.

Typical decisions include the efficient organisation of own work and that of others in a work area or within a team/group and the improvement of throughput and cycle times.

Decisions are made within the scope of the authority of the individual and other employees in the area or team/group and according to procedures.

This unit primarily requires the application of skills associated with communication and information gathering, teamwork and problem solving to analyse the cost components of work processes. Initiative and enterprise, and planning and organising are also required to identify opportunities for improved cost-efficiency. This unit also requires a degree of self-management and learning to effectively operate and maintain skills and performance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Analyse cost components of work area or team function	1.1	Identify cost components in the product or process.
		1.2	Identify costs factors under control of area or employees in the team.
		1.3	Identify causes of variability in costs.
		1.4	Analyse impact of costs on production or process activities undertaken.
2	Improve cost-efficiency of processes and procedures	2.1	Identify methods of improving productivity and/or reducing costs within area or team's responsibility.
		2.2	Determine cost/benefit ratio of alternative methods of improving productivity and/or reducing costs.
		2.3	Consult with all relevant stakeholders regarding possible changes.
		2.4	Recommend changes which will increase productivity and reduce cost and variability.
		2.5	Implement recommended changes in consultation with relevant stakeholders.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional

contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Cost components include consideration of all of:

- fixed and variable costs, such as power/energy, materials and other inputs, plant and equipment, salary and wages, and office expenses (e.g. telephone)
- government taxes and charges.

Causes of variability in costs include one or more of:

- time-based variation
- fluctuations in variable costs related to different volumes of sales, production or operations
- fluctuations in fixed/overhead costs related to changes in the economy, financial markets and similar
- abnormal cost fluctuations due to poor design of product or process, poor scheduling, faults, breakdowns and other muda (waste).

Process includes consideration of all of:

- all functions that go to meet customer requirements
- all other required functions (e.g. regulatory related functions)
- design
- production
- maintenance
- logistics

- office processes.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Benefits include all of:

- positive benefits
- negative benefits
- quality
- safety
- reliability
- similar issues which may be impacted by a cost saving.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403030A Improve cost factors in work practices

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403030 Improve cost factors in work practices

Modification History

Release 1. Supersedes and is equivalent to MSS403030A Improve cost factors in work practices

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to improve cost factors on one (1) or more occasion and to:

- analyse cost components
- improve cost efficiency in an area related to own work
- express cost factors in specific terms, such as cost per item, per unit of time or other measures of output.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- cost components of products made
- costs concepts, such as expense/capital, income and benefit/cost ratios
- major cost contributors to product (e.g. energy, materials/other inputs, labour and distribution, and so on depending on the product and process)
- distinguish between internally and externally controlled costs
- distinguish between overhead/capital, expense, labour and other consumables.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real cost improvement activity in an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403032 Analyse manual handling processes

Modification History

Release 1. Supersedes and is equivalent to MSS403032A Analyse manual handling processes

Application

This unit of competency covers the skills and knowledge required to analyse manual handling in terms of its efficiency and safety.

This unit applies to an individual who is required to examine the manual handling component of a job and improve it in terms of safety, effort required and efficiency. This may be conducted for a job performed by others or it may be for the person's own job.

This unit primarily requires the application of skills associated with problem solving, initiative and enterprise to identify safe and efficient manual handling, and planning and organising to ensure processes are implemented. This unit also requires communication with, and involvement of, others to ensure they understand the approach and to facilitate training.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Assess manual	1.1	Identify manual handling hazards in work area.

	handling risks	1.2	Assess risks arising from manual handling hazards.
2	Analyse physical effort requirements of job	2.1	Determine basic manual handling requirements of job.
		2.2	Analyse requirements in terms of components, such as lift, move, place and hold.
		2.3	Analyse items to be handled in terms such as weight, size, shape or other hazards.
3	Determine time/effort components of physical effort	3.1	Break required movement pattern down into movement components.
		3.2	Determine time and effort requirements for movements.
		3.3	Develop alternative movement patterns.
		3.4	Determine time and effort requirements for alternative movements.
		3.5	Determine handling aids required to assist movement.
		3.6	Determine preferred movement pattern.
4	Analyse the ergonomics of physical effort	4.1	Analyse the ergonomics of the preferred movement pattern.
		4.2	Develop substitute movements for any movement which is not ergonomically sound.
		4.3	Determine handling aids required to improve ergonomics of required movements.
5	Optimise application of physical effort	5.1	Select movement patterns which are ergonomically sound and time and effort efficient.
		5.2	Ensure all relevant people are trained to use these methods.
		5.3	Ensure procedures and practices reflect the optimum methods.

- 5.4 Communicate with team members and involve them in development of alternatives to ensure awareness and facilitate learning.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Procedures (written, •** work instructions

- verbal, visual, computer based, etc.) include one or more of:**
- standard operating procedures (SOPs)
 - safe work method statements
 - formulas/recipes
 - batch sheets
 - temporary instructions
 - any similar instructions provided for the smooth running of the plant.

- Manual handling hazards include one or more of**
- loads that pose a risk of injury
 - ergonomically unsound movements
 - hazard requirements as defined by relevant work health and safety (WHS) Acts and regulations, industry standards and best practice.

- Ergonomically unsound movements include one or more of**
- awkward and repetitive movements
 - carrying, pushing, pulling or lifting of heavy loads
 - carrying or movement of hard, sharp, slippery or other difficult to grasp loads.

- Ergonomically sound movements include one or more of**
- keeping loads close to the body and near the person's centre of gravity
 - using diagonal foot positions for lifting
 - moving loads at waist height rather than directly from the floor.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403032A Analyse manual handling processes

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403032 Analyse manual handling processes

Modification History

Release 1. Supersedes and is equivalent to MSS403032A Analyse manual handling processes

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for at least (1) one job/process, to:

- analyse manual handling requirements and risks
- distinguish between ergonomically sound and unsound movement
- analyse manual handling movements and risks for an individual
- relate manual handling requirements to job efficiency.

Knowledge Evidence

- Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:
- principles of ergonomics/safe movement
- principles of work analysis
- relevant work health and safety (WHS) Acts and regulations as they apply to manual handling
- principles of job and work method design as applied to efficient and safe movement
- aids that can assist with or substitute for manual handling.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include analysing manual handling processes in own workplace

- will typically include the use of appropriate manual handling guides, tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
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MSS403040 Facilitate and improve implementation of 5S

Modification History

Release 1. Supersedes and is equivalent to MSS403040A Facilitate and improve implementation of 5S

Application

This unit of competency covers the skills and knowledge required by an individual to facilitate the implementation and improvement of the 5S by self and others in a team or work area. The facilitation may be undertaken by formally designated supervisory staff, such as team leaders or other individuals in a competitive systems and practices implementation role, who need to provide support and encouragement to others to facilitate the achievement of 5S outcomes in the workplace.

This unit requires the application of skills associated with communication, teamwork, problem solving, initiative and enterprise, planning and organising, and self-management in order to provide leadership in a 5S environment. This unit has a strong emphasis on planning and change management, but also requires an ability to learn from experience and feed new information back into strategies to improve performance.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Facilitate the set-up of 5S	1.1 Assist others to determine what are necessary and unnecessary items in the work area. 1.2 Assist others to determine optimum assigned location for all necessary items. 1.3 Liaise with relevant production and work health and safety (WHS) personnel in determining optimum locations. 1.4 Assist others to determine optimum location for unnecessary items. 1.5 Assist others to determine 5S schedule. 1.6 Assist others to achieve the required level of skill.
2	Facilitate the implementation of 5S	2.1 Ensure procedures reflect 5S practices. 2.2 Assess skill base of team or work group members in 5S and arrange for any required training. 2.3 Ensure that any damage and/or safety risks reported by the team or work group are addressed through correct mechanisms.
3	Monitor 5S	3.1 Check work area for 5S implementation as part of normal routine. 3.2 Identify non-conformances. 3.3 Negotiate solutions to non-conformances.
4	Improve 5S	4.1 Work with others to find areas for improvement. 4.2 Assist others to develop improvement solutions. 4.3 Facilitate the availability of resources required for the improvement solution. 4.4 Facilitate the implementation of the improvement solution.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Procedures (written, verbal, visual, computer based, etc.) include one or more of:**
- work instructions
 - standard operating procedures (SOPs)
 - safe work method statements
 - formulas/recipes
 - batch sheets
 - temporary instructions
 - any similar instructions provided for the smooth running of the plant.

- 5S includes all of:**
- sort
 - set in order
 - shine
 - standardise
 - sustain.
- Sort includes all of:**
- separating necessary from unnecessary items (equipment and supplies)
 - keeping only what is absolutely necessary for the work processes that comprise the job
 - disposing of (or relocating) all other items.
- Set in order includes all of:**
- assigning required equipment and materials appropriate locations in the work area
 - consideration of frequency of use, ergonomics and WHS
 - provision of facilities to maintain the locations.
- Shine includes one or more of:**
- keeping the work area clean at all times which should be carried out to a regular daily schedule against allowed time, usually at the end of the day or of a particular process
 - keeping work area, including virtual work area, organised
 - noting any signs of wear, damage, leakage, safety risks or other issues that require immediate attention.
- Standardising includes one or more of:**
- activities that help maintain the order and the 5S standards
 - using procedures and checklists developed from a procedure.
- Sustain includes one or more of:**
- making sure that daily activities are completed every day regardless of circumstance
 - undertaking inspections, including:
 - informal inspections that should be carried often, at least weekly
 - formal inspections that should be carried out at least monthly.
- Items in work area include one or more of:**
- office supplies
 - materials
 - paperwork

	• furniture • storage systems and cabinets • lighting, wiring, plumbing and other services designed to support a working environment in the office • manuals • personal items (e.g. bags, phones, lunch boxes, clothing, photos and ornaments) • safety and personal protective equipment • any other item which happens to be in the work area.
Teams include one or more of:	• formal teams • informal teams • people working in the same area.
Target work area may be a physical and/or virtual workspace and includes one or more of:	• used by a person, a team or a cross-functional group • common to part/s of a process or value stream (already defined) • shared by people who undertake a defined procedure or set of procedures • needed to support a particular function.
Appropriate places include areas designated for one or more of:	• recycling • rubbish removal • staff room/lunch room/kitchen • office supplies, filing and other storage • functions, such as printing/copying • holding until status is confirmed.
Optimum assigned location includes:	• making changes to the layout of furniture, equipment and personnel in order to facilitate the smooth and continuous flow of work through process steps taking into account WHS considerations.
Non-conformance includes:	• incorrect or incomplete application of 5S procedures, including any daily tasks, scheduled inspections and continuous improvement procedures.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403040A Facilitate and improve implementation of 5S

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403040 Facilitate and improve implementation of 5S

Modification History

Release 1. Supersedes and is equivalent to MSS403040A Facilitate and improve implementation of 5S

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, in one (1) or more allocated areas, to:

- identify the scope of the services and/or functions supplied to and by the team or work area and the deliverables expected by customers, including the ultimate customer
- facilitate a systematic approach to implementing 5S
- lead and motivate others in achieving 5S outcomes and making improvements to the 5S systems
- set up systems for monitoring and improving 5S implementation
- manage non-conformances in implementation of 5S.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- principles and purpose of 5S
- methods of identifying waste in the work area, such as:
 - waste walk
 - document tagging
 - tracking/log sheets
 - spaghetti diagrams
 - existing information technology and enterprise resource systems (e.g. SCADA, ERP and MRP)
- methods of identifying and evaluating options
- work health and safety (WHS) requirements relevant to team and work areas
- processes for identifying and addressing skill gaps.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:

- should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
- will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- must include the implementation of 5S procedures in a work area where 5S has not previously been undertaken, or, demonstration of improving 5S application in a work area that has already undergone prior 5S procedures
- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations. Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403041 Facilitate breakthrough improvements

Modification History

Release 1. Supersedes and is equivalent to MSS403041A Facilitate breakthrough improvements

Application

This unit of competency covers the knowledge and skills required to facilitate implementation of discrete targeted improvement activities to achieve breakthrough improvements in selected processes, operations or products. Typically this approach is used for improvements in areas of waste identified through value stream mapping.

This unit applies to team leaders and others who are providing guidance and support to assist a team of employees to identify improvements that can be implemented to operations, processes or products in a brief intensive project.

The unit also covers ensuring that the improvements are sustained. The process of achieving breakthrough improvements is often called kaizen blitz in lean terminology.

This unit assumes that one or more processes and operations have been mapped.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Prepare for improvement event	1.1 Engage team members in the improvement event.
		1.2 Identify process or processes to be targeted in the improvement event.
		1.3 Assist team members to identify how their own roles contribute to value to the customer.
		1.4 Assist team to identify the boundaries of the event, including any imposed exclusions.
		1.5 Identify key process indicators and other information required for improvement event.
		1.6 Identify skill needs for personnel engaged in breakthrough improvement event and arrange for any required training.
		1.7 Establish communication processes with sponsor and stakeholders.
2	Identify improvements	2.1 Assist team to review current processes, operations or products and identify options for radical improvements.
		2.2 Facilitate team activities and other relevant personnel to evaluate the options and agree on improvements to be made.
		2.3 Encourage and assist team and others to plan the activities and identify metrics to be monitored.
		2.4 Facilitate allocation of resources and strategies to manage impact on routine work.
3	Facilitate the event	3.1 Assist team to gather baseline data on the selected metrics.
		3.2 Assist team to identify and address barriers to making the improvements.
		3.3 Monitor team dynamics and facilitate team focus and

			cooperation.
		3.4	Liaise with sponsor to communicate progress and maintain their support.
4	Evaluate improvements	4.1	Assist team to gather and interpret data on the metrics.
		4.2	Facilitate team activities to evaluate the outcomes of the event.
		4.3	Identify causes for areas of poor performance from changes and identify any additional changes to address them.
		4.4	Report to sponsor and other stakeholders on the outcomes of the event.
5	Embed improvements	5.1	Establish mechanisms to ensure new systems and/or practices are communicated to relevant personnel.
		5.2	Motivate team to apply the new systems and/or practices and sustain improvements.
		5.3	Ensure the new systems and/or practices are reflected in relevant procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Team in this unit is any group of employees engaged in a breakthrough improvement event and includes one or more of:

- a permanent formally identified team
- a sub-group of a team
- a formally designated teams
- an informal groups of employees
- other stakeholders who may be brought together for a breakthrough improvement event
- a specially established group for the breakthrough event (e.g. a combined production/administration/ logistics group convened for a breakthrough event addressing delivery issues).

Scope and benefit statements include one or more of:

- description of the business
- the target work process
- what key stakeholders seek from the improvement project
- a mission for the event
- a set of goals
- a statement of the do's and don'ts for the improvement project.

Boundaries define one or more of:

- the start and end point of the process being targeted
- the steps of the process to be included and excluded
- specific job roles or related processes to be included or excluded
- timeframe for the event.

Breakthrough improvement (also known as kaizen blitz) is characterised by one or more of:

- using a formal process
- being a discrete targeted activity that is achieved in a relatively short timeframe
- delivering significant level of improvement.

Mechanisms to communicate and sustain improvements include one or more of:

- scheduled audits
- regular monitoring and/or reporting activities
- use of visual aids, such as targets and progress boards, process charts and procedure posters
- communications, such as standing items for team meetings, email reminders or updates.

Imposed exclusions include one or more of:

- equipment excluded from efficiency or layout review because of budget constraints
- regulatory requirements that do not add value
- organisation requirements, policies or procedures beyond the influence of the team
- other required muda.

Key process indicators include one or more of

- statistical process control data/charts
- orders
- lost time, injury and other work health and safety (WHS) records
- equipment reliability charts.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403041A Facilitate breakthrough improvements

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403041 Facilitate breakthrough improvements

Modification History

Release 1. Supersedes and is equivalent to MSS403041A Facilitate breakthrough improvements

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more breakthrough improvement events, to:

- interpret operations, processes and products in terms of value to the customer
- identify, analyse and evaluate information from a variety of sources to identify opportunities for breakthrough improvements
- lead and motivate others in planning, implementing and sustaining improvements.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- team and organisation deliverables and processes used to achieve them
- how organisation operations and processes contribute to the value stream
- types of waste (muda) and imposed exclusions
- methods of identifying and evaluating options
- work health and safety (WHS) requirements relevant to the target work areas.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.
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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS403051 Mistake proof an operational process

Modification History

Release 1. Supersedes and is equivalent to MSS403051A Mistake proof an operational process

Application

This unit of competency applies to an individual who needs to analyse a process that a team is responsible for and determine methods of mistake proofing it (e.g. ensuring it only produces product within an acceptable range or error-free transport and storage). The person will typically be a technical expert, team leader or be in a role where they have sufficient technical understanding of processes in their own work and that of others to be able to mistake proof the production process in their area. After improvement activities have been undertaken these improvements need to be sustained.

This unit requires the application of skills associated with information gathering and analysis. Initiative, enterprise and problem solving are also required to identify mistakes and determine strategies for eliminating them. This unit also requires communication and teamwork skills to ensure mistake proofing strategies are implemented and self-management and learning skills to continually reflect on and integrate feedback about the effectiveness of strategies.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Analyse process	1.1	Identify sources of variability/non-conformance in the process.
		1.2	Identify critical control points in process.
		1.3	Analyse causes of variability/non-conformance.
2	Develop preventative techniques/systems	2.1	Liaise with team members and other people to develop mistake proof options for performing operation.
		2.2	Test and validate mistake proofing options.
3	Implement permanent fix	3.1	Liaise with relevant people to have systems/procedures changed to implement solution.
		3.2	Liaise with relevant people to implement the solution.
		3.3	Liaise with relevant people to ensure self and others in the team or work area have an appropriate skills set.
		3.4	Follow through to ensure implementation occurs.
4	Monitor implementation	4.1	Critically observe the implementation.
		4.2	Compare the results of the implementation against the expected outcomes.
		4.3	Modify solution to improve outcomes.
		4.4	Ensure procedures reflect change.
		4.5	Ensure training/assessment reflects change.
		4.6	Audit change at agreed period/cycle.
		4.7	Take action on any observed deviation.
5	Seek improvements	5.1	Observe changes.
		5.2	Analyse process again, if required, to ensure improvements are sustained.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Mistake proofing (baka-yoke or poka-yoke) includes one or more of:

- eliminating the possibility of an error occurring
- reducing the occurrence of errors and/or to minimise their impact
- eliminating the possibility of the error via changes to the process
- preventing the error from occurring via physical or virtual

barriers

- reducing likelihood of the error by encouraging correct action (e.g. through warning systems)
- mitigating the impact of the error if it does occur.

Prioritising options for mistake proofing includes one or more of:

- success rate in eliminating errors
- feasibility
- skills required by employees
- cost
- capacity to reduce waste.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS403051A Mistake proof an operational process

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS403051 Mistake proof an operational process

Modification History

Release 1. Supersedes and is equivalent to MSS403051A Mistake proof an operational process

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to mistake proof (apply baka yoke or poka yoke) on one (1) or more occasions and to:

- analyse causes of variability and non-conformity
- develop and validate baka yoke or poka yoke options
- implement most appropriate option
- monitor the change and seek further improvements.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- baka yoke and poka yoke approaches
- factors causing variability in the process and methods of controlling it
- analyse error causes and determine control options
- analyse benefit/cost, feasibility, regulatory compliance and perceived value to the customer
- validation of baka yoke and poka yoke proposals.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real mistake proofing project in an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404050 Undertake process capability improvements

Modification History

Release 1. Supersedes and is equivalent to MSS404050A Undertake process capability improvements

Application

This unit of competency covers the skills and knowledge required to make process capability improvements, including analysing data from the process, developing improvements to eliminate variation due to assignable causes, and then implementing actions.

This unit applies to a person who reviews a range of process capability data and information, makes/arranges for changes to be made to procedures, equipment or process and then recalculates the process capability and monitors resulting improvement actions. The person will typically be a technical expert, team leader or be in a role where they have sufficient technical understanding of processes in their own work and that of others to be able to suggest and justify process capability improvements.

Process capability may have been determined using either a six sigma or three sigma processes. This unit applies to the application of statistical methods and the determination of capability based on those methods.

This unit primarily requires the application of skills associated with communication, information gathering and analysis. Initiative, enterprise and problem solving are also required to identify opportunities to improve process capacity. This unit also requires aspects of self-management and learning to validate own analysis.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Obtain required data	1.1	Identify process for study.
		1.2	Obtain/organise process to obtain required data/information.
2	Analyse information	2.1	Analyse data and determine assignable causes.
		2.2	Develop possible improvements to eliminate assignable causes.
		2.3	Incorporate own experience and learning into proposed process improvement proposals.
		2.4	Develop process improvement proposals.
3	Improve process capability	3.1	Obtain required authorisations to implement improvements.
		3.2	Liaise with relevant people to implement improvements.
		3.3	Obtain/organise required data for improved process.
		3.4	Recalculate process capability.
		3.5	Implement revised data collection/processing and new capability information.
		3.6	Monitor improvement actions and make adjustments, as necessary.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:	• lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree.
Variation includes all of:	• random variation (no assignable cause) • non-random variation (which has an assignable cause).
Improved process capability may result from one or more of:	• continuous improvement with the process capability being recalculated periodically • an improvement project with the process capability recalculated as part of that project.
Procedures (written, verbal,	• work instructions • standard operating procedures (SOPs)

- visual, computer based, etc.) include one or any combination of:**
- safe work method statements
 - formulas/recipes
 - batch sheets
 - temporary instructions
 - any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404050A Undertake process capability improvements

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404050 Undertake process capability improvements

Modification History

Release 1. Supersedes and is equivalent to MSS404050A Undertake process capability improvements

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability to undertake one (1) or more process capability improvements and to:

- obtain required data
- determine process capability/trial limits
- use the data and other information to develop process improvement proposal(s)
- monitor the improved process and make further adjustments as appropriate.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- data collection and manipulation techniques
- variability, normal distribution and three/six sigma limits
- causes of random and non-random variation in the process
- approaches to reducing variability.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real capability improvement project for an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404052 Apply statistics to operational processes

Modification History

Release 1. Supersedes and is equivalent to MSS404052A Apply statistics to operational processes

Application

This unit covers the ability to gather and analyse process data to support the control of processes and operations. It includes interpretation of sampling procedures, frequency distributions, random and non-random variations in data/control charts; use of control limits to determine whether or not monitored processes are in control; and communicating this information to others.

This unit applies to a person working in an organisation applying statistical process control on processes or operations. The statistical process control will usually be used to monitor the processes or operations and determine when action needs to be taken. The appropriate action will then be taken in accordance with standard procedures.

This unit primarily requires the application of skills associated with gathering and analysing data and communicating statistical information to others. This unit also has a strong emphasis on problem solving, initiative and enterprise, planning and organising, and self-management to solve problems and manage processes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Collect process data	1.1	Interpret sampling scheme.
		1.2	Obtain measurements in accordance with standard sampling procedures.
		1.3	Handle data in accordance with procedures.
2	Interpret data	2.1	Plot data on appropriate control chart.
		2.2	Distinguish between random and non-random patterns of results.
		2.3	Identify results outside the control limits.
		2.4	Recognise situations requiring action.
		2.5	Take action in accordance with procedures.
		2.6	Determine cost of non-conformance.
3	Calculate control limits	3.1	Consult relevant stakeholders to determine appropriate limits.
		3.2	Use relevant methods to calculate/revise control limits.
		3.3	Plot limits on control chart and complete other records in accordance with procedures.
		3.4	Explain impact of limit to relevant stakeholders.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:

- lean operations
- agile operations
- preventative and predictive maintenance approaches
- statistical process control systems, including six sigma and three sigma
- Just in Time (JIT), kanban and other pull-related operations control systems
- supply, value, and demand chain monitoring and analysis
- 5S
- continuous improvement (kaizen)
- breakthrough improvement (kaizen blitz)
- cause/effect diagrams
- overall equipment effectiveness (OEE)
- takt time
- process mapping
- problem solving
- run charts
- standard procedures
- current reality tree.

Sampling schemes include one or more of:

- sampling for attributes or sampling for variables
- batch, continuous or custom made products
- type of sample
- size of sample
- number of items/samples
- number/type of measurements to be done on each sample
- timing of sampling
- location of sampling points
- sampling equipment
- measurement/testing equipment/methods.

Checking, analysing and storing data includes one or more of:

- calculating means, ranges, mean of means and standard deviations (using appropriate calculation aids)
- entering data into a software package
- recording data either in writing or electronically

- other required manipulations of the data.

Control charts include one or more of:

- run
- tally
- mean/range
- attributes
- other relevant charts.

Variations include all of:

- random variations for which no cause can be found
- non-random variations for which a cause can be found and so the cause of the variation eliminated (also called identifiable cause, assignable cause or special cause)
- non-random variations used to predict possible breaches of the control limits.

Limits include one or more of:

- control limits (also referred to as process capability) within which the process will operate if it is 'under control'
- appropriate limits: 1 sigma warning limits, 2 sigma warning limits, 3 sigma control limits, and 6 sigma limits.

Costs of non-conformance include one or more of:

- reprocessing/rework
- expediting
- unplanned service
- excess inventory
- complaint handline
- downtime
- returns
- scrap
- labour costs
- material costs
- infrastructure costs/overhead
- utility costs.

Procedures (written, verbal, visual, computer based, etc.) include one or any combination of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of

the process.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404052A Apply statistics to operational processes

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404052 Apply statistics to operational processes

Modification History

Release 1. Supersedes and is equivalent to MSS404052A Apply statistics to operational processes

Performance Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria under the specified conditions of assessment and must include on two (2) or more occasions:

- gathering, analysing and interpreting process data to support the control of processes and operations
- applying specified sampling procedures
- investigating the causes of variation in a process
- communicating with other employees to obtain samples/data and to explain results and limits
- calculating and plotting data and control limits
- completing other required documentation.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- purpose of sampling and measurement
- sampling methods to be used
- methods of calculating means, standard deviations and the like and their purpose in statistical control
- concept of limits, including 1, 2, 3 and 6 sigma limits
- types of control charts and their applications to different types of process/product and for different purposes
- process causes of variation and typical cause types of non-random variation
- non-process (e.g. measurement) causes of variation
- recognition of stable and unstable processes
- causes of stability/instability in the process
- calculation of control limits/process capability and the applications of different control limits
- the standard distribution curve and confidence limits.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the application of statistics to an operational process in own workplace
 - will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404053 Use DMAIC techniques

Modification History

Release 1. Supersedes and is equivalent to MSS404053A Use six sigma techniques

Application

This unit of competency covers the skills and knowledge required to apply the Define, Measure, Analyse, Improve, and Control and standardise (DMAIC) to improve quality, cost and delivery in operations and other supporting processes in the workplace. This will be undertaken with other members of the process team.

This unit requires the application of skills associated with using information, problem solving, initiative, enterprise, planning and organising in order to identify an area requiring improvement and develop a measured process to make improvements.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 **Identify an area requiring improvement**

1.1 Identify customer needs from process.

1.2 Identify customer benefits delivered by process.

1.3 Identify areas requiring improvement.

2	Apply DMAIC process	2.1	Define improvement project.
		2.2	Acquire required measurements/data.
		2.3	Analyse data and determine possible process improvements.
		2.4	Develop and test improvement solutions.
		2.5	Control and standardise the improvement.
3	Review and confirm improvement	3.1	Determine and document benefits.
		3.2	Ensure procedures and other relevant documentation is updated for improved procedure.
		3.3	Review process data after an appropriate period and confirm the improvement.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems ,including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations

	- control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping • problem solving • run charts • standard procedures • current reality tree.
DMAIC includes all of:	• define • measure • analyse • improve • control and standardise.
Define improvement project includes all of:	• 'as is' process map • defining benefits from the project • problem statement • goal statement • project scope.
Measurement includes one or more of:	• identification of key measures/attributes • sampling schedule for project • variations and limits.
Analyse includes one or more of:	• statistical analysis of data • root cause analysis • use of various problem solving/analysis tools.
Improvement includes one or more of:	• generation and testing of improvements • selection of appropriate improvements.
Control and	• documenting

standardise includes • transferring ownership of improved process.
one or more of:

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404053A Use six sigma techniques

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404053 Use DMAIC techniques

Modification History

Release 1. Supersedes and is equivalent to MSS404053A Use six sigma techniques

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability on one (1) or more occasions to:

- identify a required improvement
- apply DMAIC to that improvement
- confirm the improvement has occurred.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- methods of identifying customer needs and benefits
- methods of identifying areas requiring improvement
- DMAIC processes
- methods of confirming benefits and improvements.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real DMAIC approach to a workplace improvement.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404060 Facilitate the use of planning software systems in a work area or team

Modification History

Release 1. Supersedes and is equivalent to MSS404060A Facilitate the use of planning software systems in a work area or team

Application

This unit of competency covers the skills and knowledge required to facilitate the use of planning software in an organisation in an individual's work area or team. These systems are known by various generic names, such as Enterprise Resource Planning (ERP), Materials Resource Planning (MRPII, MRP III etc.) or by proprietary names.

This unit applies to an individual who will access the planning software system for their own work, but will also need to provide support and organise skill development programs for their team or work group members. The individual will typically be a technical expert, team leader or be in a role where they have sufficient technical understanding of processes in their own work and that of others to be able to facilitate the use of the planning software system. The planning software system will be used routinely in the work of the team or work group.

This unit primarily requires the application of skills associated with using communication technology and supporting team use of planning software. Problem solving, initiative and enterprise, and planning and organisational skills are required to ensure that planning software is used efficiently. This requires aspects of learning and self-management to ensure own performance and that of the team.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	Identify scope of planning software	1.1	Identify categories of information held by planning software.
		1.2	Identify information categories relevant to team and area processes.
		1.3	Identify range of information able to be provided to planning software by team or work group.
		1.4	Identify range of information able to be provided to team or work group by planning software.
2	Communicate using the planning software system	2.1	Send and receive information using planning software.
		2.2	Send and receive messages using planning software.
3	Make decisions using planning software	3.1	Interrogate the planning software system to find required current, historical or predicted information.
		3.2	Take actions appropriate to the information in accordance with procedures.
4	Monitor the use of planning software	4.1	Routinely monitor planning software information.
		4.2	Review performance and use of planning software with team.
5	Support others to use planning software	5.1	Regularly communicate with team or other work group members, both using planning software and face to face.
		5.2	Identify improvements required.
		5.3	Take action to implement improvements in accordance with procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Planning software integrates a range of business information including one or**
- sales/order taking
 - finance/accounting
 - logistics
 - maintenance
 - human resources

more of:

- production.

Information and message categories include one or more of:

- orders
- production/operations processes
- scheduling (e.g. daily/weekly)
- finance and accounting
- human resources (e.g. rosters, reserves, training completed and scheduled)
- quality requirements
- customers
- suppliers.

Stages where value stream actions occur include one or more of:

- sales outlet/representative
- information gathering, data analysis and research
- product design
- raw material sourcing
- intermediate processing
- final assembler/collation/preparation
- support services (e.g. accounting, finance and legal)
- storage and delivery to customer
- after market support.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404060A Facilitate the use of planning software systems in a work area or team

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404060 Facilitate the use of planning software systems in a work area or team

Modification History

Release 1. Supersedes and is equivalent to MSS404060A Facilitate the use of planning software systems in a work area or team

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, to facilitate and/or provide support on three (3) or more occasions, to:

- identify team or work group area information requirements and relate to planning software categories
- lead and motivate others in using planning software
- ensure information sent to planning software is accurate and appropriate
- obtain regular and one-off information from planning software
- make decisions using planning software generated information.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- hierarchy of planning software system and operation
- information available from/through the planning software system
- query facilities and information analysis capabilities offered by planning software
- support/training/skill development mechanisms available for access by team members.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include facilitating and/or support for teams or work groups using planning software systems in own workplace

- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404061 Facilitate the use of SCADA systems in a team or work area

Modification History

Release 1. Supersedes and is equivalent to MSS404061A Facilitate the use of SCADA systems in a team or work area

Application

This unit of competency covers the skills and knowledge required by a team leader or technical expert to personally use and facilitate the use of System Control and Data Acquisition (SCADA), or other similar systems, and support the team in their use of SCADA.

This unit applies to individuals who will access the SCADA system for their own work, but will also need to provide support and organise skill development programs for their team members. It is also relevant to maintenance personnel using a SCADA system to coordinate maintenance activities.

This unit primarily requires the application of skills associated with using communication technology and supporting team use of SCADA systems. Problem solving, initiative and enterprise, and planning and organisational skills are required to ensure the system is used efficiently.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Identify scope of SCADA system	1.1	Identify categories of information held in and control options of SCADA system relevant to team or area.
		1.2	Identify range of information able to be provided to SCADA system by team.
		1.3	Identify range of information able to be provided to team by SCADA system.
		1.4	Identify team or area functions impacted by SCADA system.
2	Communicate using SCADA system	2.1	Send and receive information using SCADA.
		2.2	Send and receive messages using SCADA.
3	Make decisions using SCADA	3.1	Interrogate the SCADA system to find required current, historical or predicted information.
		3.2	Take actions appropriate to the information.
4	Monitor the use of SCADA	4.1	Routinely monitor SCADA information.
		4.2	Identify poor uses of SCADA system within team and system inadequacies.
		4.3	Identify system improvements required.
		4.4	Take action to improve SCADA system and its use.
5	Support team use of SCADA	5.1	Regularly communicate with team, both using SCADA-based communication and face to face.
		5.2	Identify skill improvement needs.
		5.3	Identify team members who require additional support.

5.4 Take action to provide support according to procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Stages where value stream actions occur include one or more of:**
- sales outlet/representative
 - information gathering, data analysis and research
 - product design
 - raw material sourcing
 - intermediate processing
 - final assembler/collation/preparation
 - support services (e.g. accounting, finance and legal)
 - storage and delivery to customer
 - after market support.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404061A Facilitate the use of SCADA systems in a team or work area

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404061 Facilitate the use of SCADA systems in a team or work area

Modification History

Release 1. Supersedes and is equivalent to MSS404061A Facilitate the use of SCADA systems in a team or work area

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, to facilitate and/or provide support on three (3) or more occasions, to:

- identify team or area information and operations requirements and relate to SCADA system
- lead and motivate others in using SCADA system
- obtain regular and one-off information from SCADA system
- make decisions using SCADA generated information.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- hierarchy of SCADA system and operation
- information available from and controls exercised by/through the SCADA system
- query, control and other facilities and information offered by SCADA
- support/training/skill development mechanisms available for access by team members.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace
 - will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include facilitating and/or support for teams or work groups using SCADA systems in own workplace

- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404081 Undertake proactive maintenance analyses

Modification History

Release 1. Supersedes and is equivalent to MSS404081A Undertake proactive maintenance analyses

Application

This unit of competency covers the skills and knowledge required to undertake the most common forms of analyses associated with predictive/preventative/reliability centred maintenance strategies.

This unit applies to a technical expert (usually an engineer, technician or tradesperson) who is required to undertake analyses for the purpose of predictive/preventative/reliability centred maintenance as part of a competitive systems and practices strategy.

This unit primarily requires the application of skills associated with communication, teamwork, problem solving, initiative and enterprise, and planning and organising in order to undertake maintenance analyses. This is normally done in the context of using computer technology, and requires aspects of learning and self-management to ensure team involvement and facilitation of learning.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.	demonstrate achievement of the element.
1 Liaise with operator	1.1 Establish a relationship with the operator of equipment/plant. 1.2 Ensure the operator has the required skills and resources to keep the equipment/plant clean. 1.3 Ensure the operator is able to effectively monitor the operation of the equipment/plant. 1.4 Regularly communicate with operator about the overall equipment effectiveness (OEE) of their equipment/plant. 1.5 Involve operator, team leader and other key personnel in identification of skill needs and means of skill acquisition to fill any identified gaps.
2 Analyse history	2.1 Analyse mean time between failures (MTBF) from maintenance records. 2.2 Analyse performance data of the equipment/plant. 2.3 Identify causes of changes to historic trends/status. 2.4 Determine methods of ensuring causes of improvements and resolution of deterioration are locked in.
3 Undertake failure mode effects analysis (FMEA) or similar failure effects analysis	3.1 Undertake analysis. 3.2 Record results of analysis. 3.3 Investigate methods of eliminating possibility of failure and/or minimising the impact of the failure. 3.4 Liaise with operator, team leader and other key personnel regarding possible solutions. 3.5 Select most appropriate solution. 3.6 Implement selected solutions.
4 Undertake	4.1 Obtain data for condition monitoring analysis.

condition monitoring analysis	4.2	Interpret condition monitoring data.
	4.3	Predict required maintenance type and timing from condition monitoring data.
	4.4	Liaise with operator, team leader and other key personnel regarding implications of condition monitoring report.
	4.5	Involve team members in development of changes to maintenance strategy to ensure awareness, learning and commitment.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Competitive systems and practices include one or more of:	• lean operations • agile operations • preventative and predictive maintenance approaches • statistical process control systems, including six sigma and three sigma • Just in Time (JIT), kanban and other pull-related operations control systems • supply, value, and demand chain monitoring and analysis • 5S • continuous improvement (kaizen) • breakthrough improvement (kaizen blitz) • cause/effect diagrams • overall equipment effectiveness (OEE) • takt time • process mapping

- problem solving
- run charts
- standard procedures
- current reality tree.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404081A Undertake proactive maintenance analyses

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404081 Undertake proactive maintenance analyses

Modification History

Release 1. Supersedes and is equivalent to MSS404081A Undertake proactive maintenance analyses

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for two (2) or more items of equipment/plant, to:

- identify and analyse data and other information on the historical performance of equipment
- undertake MBTF, FMEA and condition monitoring analyses
- involve operators, maintenance and other stakeholders in decisions on proactive maintenance strategies
- identify root cause of failure and deterioration in equipment performance
- select and implement failure elimination or minimisation solutions.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- cleaning needs, techniques and principles of equipment in area of responsibility
- methods of assessing operator and maintenance skill gaps and filling them
- techniques for determining MTBF or similar
- techniques for undertaking FMEA or similar
- principles of competitive systems and practices strategies being implemented and how to adapt them to maintenance
- root cause analysis
- techniques to analyse condition monitoring data.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria

- multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404082 Assist in implementing a proactive maintenance strategy

Modification History

Release 1. Supersedes and is equivalent to MSS404082A Assist in implementing a proactive maintenance strategy

Application

This unit of competency covers the skills and knowledge required by a maintenance person to assist in the implementation of a proactive maintenance strategy in an organisation. This unit includes the interaction between a maintenance worker and operators, as appropriate.

This unit applies to a maintenance person in an organisation that has adopted or is implementing total preventative/productive maintenance (TPM), reliability centred maintenance (RCM) or similar strategies. As part of this, the maintenance person is expected to assist in the implementation by determining appropriate maintenance related schedules and also by providing maintenance related assistance to non-maintenance personnel, such as assisting production personnel to fulfil their role in the TPM/RCM strategy.

This unit requires the application of skills associated with problem solving and initiative and enterprise in order to analyse maintenance requirements. Communication, teamwork and planning and organising skills will be required to implement reliability strategies. This requires aspects of self-management to ensure improvement of own performance and learning.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Develop components of reliability strategy for a work/plant area	1.1 Determine manufacturer's recommended inspection, servicing and related schedules for relevant plant. 1.2 Consult with relevant people with regard to appropriate inspections, services and schedules. 1.3 Discuss any conflicts with relevant people and seek resolution of conflicts. 1.4 Develop schedules in liaison with relevant people. 1.5 Identify inspections and servicing which may be done by operations personnel in liaison with relevant stakeholders.
2	Assess current practice for maintenance implications	2.1 Identify the overall equipment effectiveness (OEE) or other organisation targets for equipment/plant. 2.2 Evaluate procedures for plant/equipment reliability implications. 2.3 Discuss current practices with relevant people to determine any plant/equipment reliability implications. 2.4 Recommend changes to improve plant/equipment reliability in accordance with procedures.
3	Assist in implementing the reliability strategy	3.1 Arrange for schedules to be incorporated in relevant work plans. 3.2 Identify training needs in discussion with relevant personnel. 3.3 Assist personnel to develop required skills for inspections/ servicing within scope of authority. 3.4 Collect data/information as required by own work plan. 3.5 Compare data/information with performance indicators. 3.6 Recommend improvements to reliability strategy in

accordance with procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations control systems
 - supply, value, and demand chain monitoring and analysis
 - 5S
 - continuous improvement (kaizen)
 - breakthrough improvement (kaizen blitz)
 - cause/effect diagrams
 - overall equipment effectiveness (OEE)
 - takt time
 - process mapping
 - problem solving
 - run charts
 - standard procedures
 - current reality tree.

- Strategies include one or more of:**
- mean time between failure (MTBF) which is one key measure of the effectiveness of a maintenance procedure, and is an indicator as to whether root causes are being found and resolved. If MTBF is reducing, then it is an indicator that the maintenance regime is

failing

- failure mode and effects analysis (FMEA) which is a systematic approach that identifies potential failure modes in a system, product or equipment based operations caused by either design or operation/process deficiencies. It also identifies critical or significant design or process characteristics that require special controls to prevent or detect failure modes. FMEA is a tool used to prevent problems from occurring
- industry sectors have highly adapted forms of FMEA and which may practice traditional FMEA in their routine maintenance while using another technique, such as Hazard and Operability Studies (HAZOP) for design and modification. HAZOP is a form of FMEA which has been practiced by the process industries for over 30 years and examines the implications of changes in process conditions to process stability
- condition monitoring which often involves quite sophisticated monitoring of equipment, including such things as vibration monitoring, instrumental analysis of lubricating oil, and so on, to determine the current state of the equipment, monitor the change in this condition and predict when it needs servicing/maintenance to maintain reliability.

Inspection includes one or more of:

- reading dials, gauges and meters
- observations, including those using sight, hearing, smell and feel
- observations of product quality/faults/rejects.

Servicing includes one or more of:

- cleaning
- lubricating
- topping up
- adjusting.

Procedures (written, verbal, visual, computer based, etc.) include one or more of:

- work instructions
- standard operating procedures (SOPs)
- safe work method statements
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404082A Assist in implementing a proactive maintenance strategy

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404082 Assist in implementing a proactive maintenance strategy

Modification History

Release 1. Supersedes and is equivalent to MSS404082A Assist in implementing a proactive maintenance strategy

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, for one (1) or more work/plant areas, to:

- source information from manuals and other technical documentation or software
- effectively communicate with users on equipment operational and maintenance history
- develop schedules for maintenance activities, including seeking technical assistance, where appropriate
- differentiate between proactive and traditional maintenance strategies.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- requirements of the proactive maintenance strategy being implemented
- operating principles and procedures for equipment/plant subject to proactive maintenance strategy
- purpose and processes for data collection in proactive maintenance strategies
- procedures relevant to own job and organisation implementation of proactive maintenance
- methods of making/recommending improvements.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace.

- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSS404083 Support proactive maintenance

Modification History

Release 1. Supersedes and is equivalent to MSS404083A Support proactive maintenance

Application

This unit of competency covers the skills and knowledge required to lead a production team/work group or maintenance team in a proactive maintenance environment.

This unit applies in a competitive systems and practices organisation where proactive maintenance strategies, such as total preventative/productive maintenance (TPM) or reliability centred maintenance (RCM) are used. This unit applies to a team leader or other person who as part of their role assists others in implementing and following the proactive maintenance practices.

The unit covers the leading of a team in proactive maintenance activities, such as keeping records, visual checks, analysis of failures and effects on production and housekeeping. The unit does not cover breakdown maintenance, condition monitoring or non-destructive testing (NDT).

This unit requires the application of skills associated with communication, teamwork, problem solving, initiative, enterprise, planning and organising in order to lead a team in the development and implementation of proactive maintenance strategies. This unit has a strong emphasis on developing and resourcing the team to interpret information and monitor equipment and operation.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Competitive systems and practices

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Lead team in monitoring process and equipment	1.1	Demonstrate to team how to observe the process/equipment continuously and critically using appropriate senses (e.g. sight and hearing) to identify any potential or actual problems.
		1.2	Identify to team data indicators that must be monitored and recorded.
		1.3	Ensure team monitors identified data indicators frequently and critically.
		1.4	Ensure symptoms of operations outside the desired range of conditions and performance are recognised.
		1.5	Analyse cause of equipment non-standard performance within scope of knowledge and skill.
		1.6	Ensure team members take timely action to solve problems or to refer problems to appropriate manager or specialist.
2	Apply proactive maintenance strategy	2.1	Obtain and discuss maintenance strategy with relevant people.
		2.2	Identify aspects of maintenance strategy which require specific input from team.
		2.3	Discuss maintenance strategy with team members.
		2.4	Ensure team members have resources and training to be able to make the required contributions.
3	Analyse standard procedures and work practices	3.1	Examine team procedures and practices for compatibility with maintenance strategy.
		3.2	Identify areas where production procedures/practices

			should be changed to comply with maintenance strategy.
		3.3	Identify areas where maintenance strategy should change to comply with production procedures and practices.
		3.4	Identify other activities or areas where changes might increase equipment reliability.
		3.5	Take action to have the required changes made.
4	Facilitate team contribution to proactive maintenance	4.1	Monitor team's contribution to proactive maintenance.
		4.2	Arrange for competency development of team members, as required.
		4.3	Facilitate ongoing examination by the team of process reliability and overall equipment effectiveness (OEE).
		4.4	Arrange for follow through and implementation of team originated improvements.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

- Competitive systems and practices include one or more of:**
- lean operations
 - agile operations
 - preventative and predictive maintenance approaches
 - statistical process control systems, including six sigma and three sigma
 - Just in Time (JIT), kanban and other pull-related operations

	- control systems - supply, value, and demand chain monitoring and analysis 5S - continuous improvement (kaizen) - breakthrough improvement (kaizen blitz) - cause/effect diagrams - overall equipment effectiveness (OEE) - takt time - process mapping - problem solving - run charts - standard procedures - current reality tree.
Team includes one or more of:	- work teams from all sections of the organisation including production, maintenance, technical, administration/finance and sales/marketing - a formally designated team - a group of employees in a common work area.
Proactive maintenance strategies and associated analyses include one or more of:	- TPM and RCM - root cause analysis (RCA) - mean time between failures (MTBF) - failure mode and effects analysis (FMEA) - condition monitoring.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS404083A Support proactive maintenance

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

Assessment Requirements for MSS404083 Support proactive maintenance

Modification History

Release 1. Supersedes and is equivalent to MSS404083A Support proactive maintenance

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include the ability, in one (1) or more work areas, to:

- communicate effectively with team on the proactive maintenance strategy being adopted and the role expected by the team in its implementation
- identify data required from team and for team for the proactive maintenance strategy
- analyse proactive maintenance strategy and current work practices of the team to identify opportunities for better fit
- differentiate between proactive and traditional maintenance strategies.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job role sufficient to fulfil their job role independently, including:

- the production process as it applies to the team area of responsibility
- equipment controls and function used in team's work area
- data ranges and indicators for normal team operations
- data and equipment variations and fault indicators able to be identified by team during operations
- range of data required from team for proactive maintenance strategy
- typical analyses used by the proactive maintenance strategy and their implication for work of the team
- responsibilities of the team, maintenance staff and technical experts
- OEE and relationship to team's operational capability.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of the workplace

- will typically include a supervisor/third-party report focussing on consistent performance and problem recognition and solving. A supervisor/third party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- must include proactive maintenance practices in own workplace
- will typically include the use of appropriate tools, equipment and safety gear requiring demonstration of preparation, operation, completion and responding to problems.
- Assessment should occur in operational workplace situations.
- Knowledge evidence may be collected concurrently with performance evidence (provided a record is kept) or through an independent process such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing relevant environmental monitoring, management or technology services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>

MSTGN3007 Monitor and operate trade waste

Modification History

Release 1. Supersedes and is equivalent to LMTGN3007B Monitor and operate trade waste

Application

This unit of competency covers the skills and knowledge required to monitor, operate, measure and report on trade waste system performance and process quality control.

This unit of competency applies to processing plant operations and inspection of work areas, monitoring, operating, measuring and reporting on trade waste systems.

Work may be conducted in restricted spaces or exposed conditions or controlled or open environments.

This unit of competency is applicable to all sectors of the textiles, clothing and footwear (TCF) industry.

Work may be conducted in small to large scale enterprises and may involve individual and team activities. Work is performed within defined procedures under direct supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Generic

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions
2	Monitor treatment plant performance	2.1	Conduct and assess routine plant inspections in accordance with organisational and plant requirements
		2.2	Collect and conduct tests of process samples
		2.3	Collect and report process data according to organisational and plant requirements and workplace procedures
		2.4	Identify corrosion damage
3	Control chemical use	3.1	Use, handle and store chemicals in accordance with organisational and statutory requirements
		3.2	Prepare chemical dosing in accordance with plant processes and organisational and statutory requirements
		3.3	Maintain information related to chemical supply and usage in accordance with statutory requirements
		3.4	Interact and communicate with other employees and relevant authorities
4	Operate and control processes	4.1	Monitor processes to maintain parameters of operation
		4.2	Identify and report process faults and operational conditions of plant in accordance with organisational and statutory requirements

- 4.3 Assess basic system adjustments to enhance system performance in accordance with organisational and statutory requirements
- 4.4 Compile reports compiled from plant and system data to meet organisational and statutory requirements

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Workplace procedures include one or more of the following:

- requirements prescribed by legislation, awards, agreements and conditions of employment
- SOPs
- work instructions
- oral, written and visual communication
- quality practices, including responsibility for maintenance of own work quality and contribution to quality improvement of team or section output
- housekeeping
- tasks related to environmental protection, waste disposal, pollution control and recycling
- WHS practices

Australian Standards include:

- the relevant industry or Australian Standards that are current at the time this unit is being undertaken

Process includes, but is not limited to, one or more of the following:

- chemical precipitation
- activated sludge
- biodegradable reduction
- solids handling

Data includes, but is not limited to, one or more of the following:

- plant performance data
- chemical usage

Tests include, but are not limited to, one or more of the following:

- settling tests
- pH
- dissolved oxygen

System adjustments include, but are not limited to, one or more of the following:

- pH correction
- dissolved oxygen levels

Equipment includes, but is not limited to, one or more of the following:

- electronic monitoring and metering systems
- manual chart recording systems
- laboratory testing and sampling equipment
- computerised equipment

Unit Mapping Information

Release 1. Supersedes and is equivalent to LMTGN3007B Monitor and operate trade waste

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>

Assessment Requirements for MSTGN3007 Monitor and operate trade waste

Modification History

Release 1. Supersedes and is equivalent to LMTGN3007B Monitor and operate trade waste

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include:

- reading and following work instructions, standard operating procedures (SOPs), safe work practices
- applying relevant standards
- conducting routine plant inspections, assessing processes, and collecting and conducting tests of process samples, in accordance with organisational and plant requirements
- complying with organisational and statutory requirements to use, handle and store chemicals, prepare and apply chemical and biological dosing
- maintaining accurate records of test results/work records
- communicating effectively within the workplace and maintaining information related to chemical supply and usage
- interpreting and applying established procedures
- identifying and reporting process faults and operational conditions of plant in accordance with organisational and statutory requirements
- compiling reports compiled from plant and system data to meet organisational and statutory requirements
- applying workplace procedures.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- relevant Australian Standards
- industry process and equipment
- system hydraulics and layout, control systems
- chemical dosing processes
- hazardous material handling procedures
- work health and safety (WHS) and environmental aspects of relevant testing processes
- workplace procedures and reporting processes
- quality practices
- workplace procedures
- recording and reporting practices.

Assessment Conditions

- Assessors must:
 - satisfy the assessor competency requirements that are in place at the time of the assessment, as set by the VET regulator
 - have vocational competency in monitoring and operating trade waste, at least to the level being assessed, with relevant industry knowledge and experience.
- Assessment should occur in operational workplace situations. Where this is not possible, or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The unit is applicable to all TCF sectors and assessment must ensure it is delivered to suit the industry it is being applied to.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a203ec5c-de7d-406b-b3e1-8f1a9b76e92e>

PMASUP420 Minimise environmental impact of process

Modification History

Release 1. Supersedes and is equivalent to PMASUP420B Minimise environmental impact of process

Application

This unit of competency covers the skills and knowledge required to minimise the environmental impact of a plant and/or process. It applies to all resources used and products made by the plant, capital projects and improvements brought about by changes in work practices and procedures.

This unit of competency applies to experienced operators or those in similar roles who are required to apply in-depth knowledge of process and plant to in order to develop practices or procedures for conserving resources and minimising pollution and waste that will deliver the most benefits.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Support

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Develop resource conservation practices and/or procedures	1.1	Identify the nature of resources used in the plant/process
		1.2	Identify the primary source of these resources
		1.3	Determine the impact of the depletion of these resources

- on the environment and society
- 1.4 Determine which resources will yield a greater benefit from their conservation
 - 1.5 Develop methods to reduce the consumption of these resources
 - 1.6 Complete required documentation to implement change
- 2 **Develop pollution minimisation practices and/or procedures**
- 2.1 Identify the nature of pollutants produced by the plant/process
 - 2.2 Determine the sources of these pollutants within the plant/process
 - 2.3 Determine the impact of these pollutants on the environment and society
 - 2.4 Determine which pollutant will yield a greater benefit from their reduction
 - 2.5 Develop methods to reduce the production of this pollutant
 - 2.6 Complete required documentation to implement change
- 3 **Develop waste minimisation practices and/or procedures**
- 3.1 Identify the nature of wastes produced by the plant/process
 - 3.2 Determine the sources of these wastes within the plant/process
 - 3.3 Identify the impact of these wastes on the environment and society
 - 3.4 Determine which wastes will yield a greater benefit from their reduction
 - 3.5 Develop methods to reduce the production of this waste
 - 3.6 Complete required documentation to implement change

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used, and include one or more of the following:

- legislative requirements, including work health and safety (WHS)
- industry codes of practice and guidelines
- environmental regulations and guidelines
- Australian and other standards
- licence and certification requirements

All operations to which this unit applies are subject to stringent health, safety and environment (HSE) requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, include one or more of the following:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMASUP420B Minimise environmental impact of process

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>

Assessment Requirements for PMASUP420 Minimise environmental impact of process

Modification History

Release 1. Supersedes and is equivalent to PMASUP420B Minimise environmental impact of process

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria, and include the ability to:

- examine plant records, data and operating procedures and practices to determine options for:
 - maximisation of product yield from raw materials
 - reduction in volume of pollutants made and/or reduction in concentration/intensity of pollutants made and/or reduction in emissions
 - minimisation of wastes
- determine relative benefits of the options and develop processes/procedures to achieve preferred options
- document preferred options and complete written and/or electronic records.

Knowledge Evidence

Evidence must be provided that demonstrates knowledge of:

- resources used by the plant and the impact on the environment and society of using resources
- nature and source of pollutants and waste materials produced by the plant
- nature and severity of the effect the pollutants and waste materials can have on the environment and society
- types of local conditions that can make environmental threats more ‘sensitive’
- pathways of entry to the environment from the plant
- process parameters and limits
- product specifications and tolerances
- principles of operation of plant/equipment
- science (e.g. physics, chemistry and biochemistry) relevant to the process, its materials and eco impacts
- regulatory framework
- organisation procedures, including those covering:
 - environmental management
 - safety, emergency and hazard control
 - procurement.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence based on a holistic assessment of the evidence.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.
- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace. Where this is not possible or practical, assessment must occur using a sufficiently rigorous simulated environment reflecting realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews (provided a record is kept).
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- In addition, the assessor or anyone acting in subject matter expert role in assessment must demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they must assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
 - relevant VET or other qualification/Statement of Attainment
 - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
 - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions
- Currency can be demonstrated through one or more of:
 - being currently employed undertaking the type of work being assessed

- being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation's policies and procedures
- having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
- conducting on-the-job training/assessments of the type of work being assessed
- being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=9fc2cf53-e570-4e9f-ad6a-b228ffdb6875>

PMBPROD211 Operate blow moulding equipment

Modification History

Release 1. Supersedes and is equivalent to PMBPROD211B Operate blow moulding equipment

Application

This unit of competency covers the skills and knowledge required to operate blow moulding equipment and ancillary equipment that is integral to the process.

This unit of competency applies to operators who are required to carry out pre-start, start and stop procedures, monitor and adjust the equipment, maintain feed and recognise routine and non-routine problems and take appropriate action.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members, team leader and supervisor, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Production

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Check work	1.1	Identify work requirements from production plan or

requirements		request
	1.2	Check product, materials and equipment meet requirements for job
	1.3	Recognise requirements which may not be in accordance with usual practice
	1.4	Ask questions of appropriate person to confirm unusual practice
	1.5	Ensure housekeeping is to requirements
	1.6	Identify hazards associated with the job and take appropriate action
	1.7	Perform other pre-operational checks in accordance with procedures
2	Start up blow moulding equipment to procedures	2.1 Conduct pre-start checks
		2.2 Start up equipment safely and 'dry run' to warm hydraulics and components to operating temperature before production, as required
		2.3 Check condition of equipment and introduce raw materials as required
3	Operate blow moulding equipment to procedures	3.1 Check process is operating within required limits
		3.2 Check product is in specification and to required quality standard
		3.3 Ensure product is consistently ready for next operation
		3.4 Maintain supply of materials as required
		3.5 Complete logs and records as required
		3.6 Collect and segregate scrap, trim and other materials as required
		3.7 Keep equipment and work area clean
		3.8 Pause machine cycle and perform emergency stop, as required

4	Respond to routine problems to procedures	4.1	Identify likely faults that occur during the operation
		4.2	Identify and take action on causes of routine faults in accordance with procedures
		4.3	Make sure appropriate records and log books of equipment operations are maintained to meet procedures
		4.4	Identify non-routine problems and report to designated person

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- health, safety and environmental (HSE) legislation, regulations and codes of practice relevant to the workplace, equipment and production processes and hazardous materials
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an

apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulae/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Tools and equipment

Tools and equipment include:

- blow moulding machines which may be bottom blow, top blow, needle blow, tail to tail blow, parison, pre-blow and pre-squeeze, parison stretching and parison orientation type machines
- ancillary equipment that is integral to the operation of the injection moulding process, including one or more of:
 - chillers/cooling towers
 - die heating equipment
 - hopper driers
 - mixing hoppers
 - dehumidifying driers
 - air compressors
 - dosing machines
 - colour blending equipment
 - conveyors.

Additional tools and equipment will be selected as required from:

- hand tools used in the process
- hoists/lifting equipment not requiring any special permits or licences
- manual handling aids such as hand carts and trolleys
- relevant personal protective equipment (PPE).

Hazards Hazards must be identified and controlled. Identifying hazards requires consideration of:

- weight, shape, volume of materials to be handled
- hazardous products and materials
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- rotational equipment or vibration
- high temperatures
- smoke, dust, vapours or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- equipment failures
- machinery, equipment and product mass
- other hazards that might arise.

Routine problems Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of:

- equipment/machine malfunction
- variations in temperature, pressure, speed, inflation
- variations in materials or contamination of materials
- incorrect quantity of materials/additives
- die/tooling problems or damage.
- product problems, such as:
 - wall thinning
 - holes
 - poor surface finish
 - warping
 - poor colour dispersion
 - ejection damage
 - colour contamination
 - black spots.

Known solutions are drawn from one or more of:

- procedures
- training
- remembered experience.

Non-routine problems must be reported according to according to relevant procedures.

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMBPROD211B Operate blow moulding equipment

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

Assessment Requirements for PMBPROD211 Operate blow moulding equipment

Modification History

Release 1. Supersedes and is equivalent to PMBPROD211B Operate blow moulding equipment

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- read and interpret procedures, job specifications, basic machine control panels, material labels and safety data sheets (SDS)
- select and use tools and equipment to meet job specifications
- monitor blow moulding and ancillary equipment using measured/indicated data and smell, sight, sound and feel as appropriate
- monitor and interpret key variables, including:
 - machine conditions
 - production rate
 - reasons for interruptions
 - product integrity and general conformance to specifications
- operate and adjust the equipment to meet product quality and production output specifications
- pause the equipment or shut down equipment in normal and abnormal circumstances
- identify hazards and apply relevant hazard controls
- apply safety procedures
- apply housekeeping procedures
- apply waste management procedures
- recognise early warning signs of equipment/processes needing attention or with potential problems
- recognise routine and non-routine problems
- identify when the operator is able to rectify faults, when assistance is required and who is the appropriate source for assistance
- take action to resolve faults or report faults to appropriate personnel
- distinguish between possible causes of routine faults, including:
 - raw material variations/contamination
 - process abnormalities
 - procedural errors
 - mechanical abnormalities
- communicate effectively with team/work group and supervisors

- complete workplace records
- do basic arithmetical manipulations, including additions, subtractions, divisions, fractions and percentages.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job sufficient to operate under routine only supervision and to solve routine problems, including knowledge of:

- the function of blow moulding equipment, machine components and guides
- principles of operation of the equipment
- purpose and requirements of 'dry running' before starting production
- the potential effects of variations in raw materials and equipment operation in relation to quality of product
- reasons for checking process control panels and reporting readings which are outside of normal range of process variability
- processing behaviour of polymers and the role of additives
- production workflow sequences and materials demand
- factors which may affect product quality or production output and appropriate remedies
- routine problems, their probable causes and relevant corrective actions
- organisation procedures relevant to the work environment/job role
- hierarchy of control
- hazards that may arise in the job/work environment and:
 - their possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- In all plants it may be appropriate to assess this unit concurrently with units such as:
 - teamwork
 - communication.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant
 - will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
 - must include the use of an appropriate industrial item of equipment requiring demonstration of operation, start and stop procedures and responding to problems

- may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from demonstration of skills and one or more of:
 - walk-throughs
 - pilot plant operation
 - industry-based case studies/scenarios
 - 'what ifs'.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- In addition the assessor or anyone acting in subject matter expert role in assessment shall demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they shall assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
 - relevant VET or other qualification/Statement of Attainment
 - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
 - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions
- Currency can be demonstrated through one or more of:
 - being currently employed undertaking the type of work being assessed
 - being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation's policies and procedures

- having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
- conducting on the job training/assessments of the type of work being assessed
- being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

PMBPROD270 Operate injection blow moulding equipment

Modification History

Release 1. Supersedes and is equivalent to PMBPROD270B Operate injection blow moulding equipment

Application

This unit of competency covers the skills and knowledge required to operate injection blow moulding equipment and ancillary equipment that is integral to the process.

This unit of competency applies to operators who are required to carry out pre-start, start and stop procedures; monitor and adjust the equipment; maintain feed; and recognise routine and non-routine problems and take appropriate action.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members, team leader and supervisor, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Production

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Check work	1.1	Identify work requirements from procedures

	requirements	1.2	Identify product, materials and equipment requirements for job
		1.3	Recognise hazards and take appropriate action
		1.4	Check with supervisor/appropriate person if requirements are not in accordance with usual practice
2	Conduct pre-start checks as required	2.1	Check safety gates and guards are in position and working
		2.2	Check raw materials are correct
		2.3	Undertake other pre-start checks to procedures
		2.4	Start up equipment safely and 'dry run' to warm hydraulics and components to operating temperature before production, as required
3	Operate equipment to procedures	3.1	Check condition of equipment and introduce raw materials as required
		3.2	Check product/process is within required limits
		3.3	Collect products and store as required
		3.4	Check product is in specification/to required quality standard
		3.5	Maintain supply of materials as required
		3.6	Complete logs and records when required
		3.7	Collect and reprocess/discard scrap/trim and other materials
		3.8	Clean up equipment and work area
		3.9	Pause equipment, or stop equipment in an emergency, as required
4	Respond to routine problems	4.1	Recognise known faults that occur during the operation
		4.2	Identify and take action on causes of routine faults

to procedures	4.3	Log problems as required
	4.4	Identify non-routine process and quality problems and take appropriate action

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- health, safety and environmental (HSE) legislation, regulations and codes of practice relevant to the workplace, equipment and production processes and hazardous materials
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Tools and equipment

Tools and equipment include:

- injection moulding machines which may be electrical, mechanical, electromechanical or hydraulic
- components of injection moulding machines, including material supply systems, plastification unit, dies/tools and injection blow units
- ancillary equipment that is integral to the process, including one or more of:
 - chillers
 - die heating equipment
 - hopper driers
 - mixing hoppers
 - dehumidifying driers
 - air compressors
 - dosing machines
 - colour blending equipment
 - conveyors.

Additional tools and equipment will be selected as required from:

- hand tools used in the process
- material loading equipment used for loading of raw materials
- relevant personal protective equipment (PPE).

Hazards

Hazards must be identified and controlled. Identifying hazards requires consideration of:

- weight, shape, volume of materials to be handled
- hazardous products and materials
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks

- rotational equipment or vibration
- high temperatures
- smoke, dust, vapours or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- equipment failures
- machinery, equipment and product mass
- other hazards that might arise.

Routine problems

Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of:

- equipment malfunction
- variations in temperature, pressure, speed and inflation
- variations in materials
- contamination of materials
- mould damage
- mould/tooling problems
- product problems, such as:
 - wall thinning
 - holes
 - poor surface finish
 - warping
 - poor colour dispersion
 - ejection damage
 - colour contamination
 - black spots.

Known solutions are drawn from one or more of:

- procedures
- training
- remembered experience.

Non-routine problems must be reported according to according to relevant procedures.

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMBPROD270B Operate injection blow moulding equipment

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

Assessment Requirements for PMBPROD270 Operate injection blow moulding equipment

Modification History

Release 1. Supersedes and is equivalent to PMBPROD270B Operate injection blow moulding equipment

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- read and interpret procedures, job specifications, basic machine control panels, material labels and safety data sheets (SDS)
- select and use tools and equipment to meet job specifications
- monitor injection blow moulding and ancillary equipment using measured/indicated data and smell, sight, sound and feel as appropriate
- monitor and interpret key variables, including:
 - operating temperatures
 - speed
 - cycle time
 - output rate
 - concentration or dispersion of colour
 - product weight
 - product wall thickness
 - product integrity and general conformance to specification/sample
- operate and adjust the equipment to meet product quality and production output specifications
- pause the equipment or shut down equipment in normal and abnormal circumstances
- identify hazards and apply relevant hazard controls
- apply safety procedures
- apply housekeeping procedures
- apply waste management procedures
- recognise early warning signs of equipment/processes needing attention or with potential problems
- recognise routine and non-routine problems
- identify when the operator is able to rectify faults, when assistance is required and who is the appropriate source for assistance
- take action to resolve faults or report faults to appropriate personnel
- distinguish between possible causes of routine faults, including:
 - raw material variations/contamination

- process abnormalities
- procedural errors
- mechanical abnormalities
- communicate effectively with team/work group and supervisors
- complete workplace records
- do basic arithmetical manipulations, including additions, subtractions, divisions, fractions and percentages.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job sufficient to operate under routine only supervision and to solve routine problems, including knowledge of:

- the function of injection blow moulding equipment, machine components and guides
- principles of operation of the equipment
- the potential effects of variations in raw materials and equipment operation in relation to quality of product
- reasons for checking process control panels and reporting readings which are outside of normal range of process variability
- processing behaviour of polymers and the role of additives
- production workflow sequences and materials demand
- factors which may affect product quality or production output and appropriate remedies
- routine problems, their probable causes and relevant corrective actions
- organisation procedures relevant to the work environment/job role
- hierarchy of control
- hazards that may arise in the job/work environment and:
 - their possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- In all plants it may be appropriate to assess this unit concurrently with units such as:
 - teamwork
 - communication.
- The collection of performance evidence:
 - should occur over a range of situations which include typical disruptions to normal, smooth operation of an operating plant

- will typically include a supervisor/third-party report or other evidence, focusing on consistent performance and problem recognition and solving. A supervisor/third-party report must be prepared by someone who has a direct, relevant, current relationship with the person being assessed and who is in a position to form a judgement on workplace performance relevant to the unit of competency
- must include the use of an appropriate industrial item of equipment requiring demonstration of operation, start and stop procedures and responding to problems
- may use industry-based simulation for all or part of the unit particularly where safety, lack of opportunity or significant cost is an issue.
- Assessment should occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from demonstration of skills and one or more of:
 - walk-throughs
 - pilot plant operation
 - industry-based case studies/scenarios
 - 'what ifs'.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- In addition the assessor or anyone acting in subject matter expert role in assessment shall demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they shall assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
 - relevant VET or other qualification/Statement of Attainment
 - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
 - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions

- Currency can be demonstrated through one or more of:
 - being currently employed undertaking the type of work being assessed
 - being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation's policies and procedures
 - having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
 - conducting on the job training/assessments of the type of work being assessed
 - being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

PMBTECH406 Diagnose production equipment problems

Modification History

Release 1. Supersedes and is equivalent to PMBTECH406A Diagnose production equipment problems

Application

This unit of competency covers the skills and knowledge required to diagnose production equipment problems. It applies to product faults, including reject products and other faults, and production faults/problems.

This unit of competency applies to advanced operators, technicians or those in similar roles who are required to determine the possible causes of product/production faults; investigate the likely equipment, plant and/or process causes of the faults; isolate the most probable cause; recommend the solution and monitor its implementation.

This unit of competency applies to an operator/technician applying specialised theoretical and technical knowledge and well developed skills in situations that require autonomy, discretion and judgement. The operator/technician will take the lead role in the activity but will need to liaise with a range of people at all levels in the organisation to obtain information and to implement the solution. The operator/technician will have detailed operational and process knowledge but is not required to demonstrate 'hands on' operation of equipment as part of this competency.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Technical

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Identify faults in products/product ion	1.1	Examine products/production process
		1.2	Identify faults
		1.3	Categorise faults according to type/likely cause
		1.4	Prioritise faults for action
2	Determine most probable possible cause(s) of fault	2.1	Analyse fault to determine possible causes
		2.2	Investigate possible causes to eliminate less probable causes
		2.3	Short list probable causes
		2.4	Check hypothesis of cause(s) is supported by the data available
		2.5	Identify most probable cause
3	Implement solution to fault	3.1	Develop recommended solution to fault
		3.2	Check health, safety and environment (HSE) implications of solution and modify solution as appropriate
		3.3	Communicate the recommendation as appropriate
		3.4	Check recommendation has been understood and can be implemented
		3.5	Check all hazard controls are in place
		3.6	Monitor progress of implementation
		3.7	Modify recommended solution as required
4	Check fault	4.1	Monitor product/process for fault

solution has worked

- 4.2 Monitor HSE impacts of changes
- 4.3 Repeat analysis and solution process if required
- 4.4 Update records and procedures to reflect successful solution

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- HSE legislation, regulations and codes of practice relevant to the workplace, manual handling, hazardous materials
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- technical specifications
- technical drawings
- test procedures
- emergency procedures
- work instructions
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Hazards Hazards must be identified and controlled. Identifying hazards requires consideration of:

- hazardous products and materials
- vapours or other atmospheric hazards
- interaction of polymers, additives and other materials
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- structural hazards
- equipment failures
- machinery, equipment and product mass
- other hazards that might arise.

Unit Mapping Information

Release 1. Supersedes and is equivalent to PMBTECH406A Diagnose production equipment problems

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

Assessment Requirements for PMBTECH406 Diagnose production equipment problems

Modification History

Release 1. Supersedes and is equivalent to PMBTECH406A Diagnose production equipment problems

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and demonstrate the ability to:

- read and interpret test results, technical information, product specifications, instruments/control panels, material labels and safety data sheets (SDS)
- examine products/process to identify faults via one (1) or more of:
 - visual examination
 - examination of product quality or other records
 - examination of inspection records
 - examination of test results
 - specific examination testing undertaken as part of a product improvement activity
- analyse the faults to identify all feasible causes of the problem
- investigate possible causes to short list probable causes including one (1) or more of:
 - talking with operators and others
 - checking machine histories for prevailing process conditions
 - checking current process/equipment conditions
 - carrying out small tests to determine the likelihood of a causal link between a condition and a fault
- confirm most probable cause based on available data
- develop and communicate solution to the fault which meets safety requirements
- monitor implementation of the solution and review and make adjustments as required
- communicate effectively with team/work group and supervisors
- complete workplace records
- document updates to procedures
- write equipment/process condition specifications.

Knowledge Evidence

Must provide evidence that demonstrates knowledge relevant to their job sufficient to fulfil their job role including knowledge of:

- how the process/equipment works

- characteristics of materials and their behaviour in relation to process conditions and stages of production
- impact of variations process conditions on the product
- impacts of equipment failure/change/variation on the product
- changes to materials at various stages of production
- quality/inspection/testing regime and relationship of results of to process conditions and equipment faults
- types of product faults, including variations in:
 - colour
 - surface finish
 - size/shape
 - physical properties
 - chemical properties
 - biological/biochemical/microbiological properties
- types of process/equipment condition problems, including:
 - settings, such as temperature and pressure
 - rates, such as feed rate and flow rate
 - setting and adjustment of equipment parts
 - worn and broken equipment parts
- product faults that can be caused by process/equipment problems and possible solutions
- organisation procedures relevant to the work environment/job role
- hierarchy of control
- hazards that may arise in the job/work environment and:
 - their possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

- The unit should be assessed holistically and the judgement of competence shall be based on a holistic assessment of the evidence.
- The diagnosis and solving of a number of faults with different types of causes is required, including:
 - product defect with process condition cause
 - product defect with equipment problem cause
 - process fault/problem with process condition or equipment cause.
- The collection of performance evidence is best done from a report and/or folio of evidence drawn from:
 - a single project which provides sufficient evidence of the requirements of all the elements and performance criteria
 - multiple smaller projects which together provide sufficient evidence of the requirements of all the elements and performance criteria.

- A third-party report, or similar, may be needed to testify to the work done by the individual, particularly when the project has been done as part of a project team.
- Assessment should use a real project in an operational workplace. Where this is not possible or where personal safety or environmental damage are limiting factors assessment must occur using a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Assessment in a simulated environment should use evidence collected from demonstration of skills and one or more of:
 - walk-throughs
 - pilot plant operation
 - industry-based case studies/scenarios
 - ‘what ifs’.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process, such as workbooks, written assessments or interviews.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications associated with this unit.
- The regulatory framework will be reflected in workplace policies and procedures and is not required to be independently assessed.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- In addition the assessor or anyone acting in subject matter expert role in assessment shall demonstrate both technical competency and currency. If the assessor cannot demonstrate technical competency and currency they shall assess with a subject matter expert who does meet these requirements.
- Technical competence can be demonstrated through one or more of:
 - relevant VET or other qualification/Statement of Attainment
 - appropriate workplace experience undertaking the type of work being assessed under routine and non-routine conditions
 - appropriate workplace experience supervising/evaluating the type of work being assessed under routine and non-routine conditions
- Currency can be demonstrated through one or more of:
 - being currently employed undertaking the type of work being assessed
 - being employed by the organisation undertaking the type of work being assessed and having maintained currency in accordance with that organisation’s policies and procedures

- having consulted/had contact with an organisation undertaking the type of work being assessed within the last twelve months, the consultation/contact being related to assessment
- conducting on the job training/assessments of the type of work being assessed
- being an active member of a relevant professional body and participating in activities relevant to the assessment of this type of work.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

RIIRIS201D Conduct local risk control

Modification History

Release	Comment
1	This unit replaces RIIRIS201B Conduct local risk control
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to conduct local risk control in the Resources and Infrastructure Industries.

This unit is appropriate for those working in operational roles.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Elements and Performance Criteria

1 Plan and prepare for risk control	1.1 Access, interpret and apply risk management documentation and ensure the work activity is compliant 1.2 Inspect work area conditions to identify potential hazards 1.3 Apply risk management procedures to deal with recognised hazards 1.4 Recognise the type and scope of unresolved hazards and their likely impact
2 Assess and identify unacceptable risk	2.1 Assess and determine consequence of an event 2.2 Consider and determine likelihood of the event 2.3 Identify criteria for the acceptability/unacceptability of the risk 2.4 Assess risk against criteria to identify if it warrants 'unacceptable risk' status and action 2.5 Effectively communicate and clarify the decision to others
3 Identify, assess and	3.1 Identify and consider all possible risk treatment options

implement risk treatments	3.2 Identify options by preliminary analysis and consideration of options 3.3 Analyse options, including resource requirements 3.4 Select most appropriate and effective course of action 3.5 Plan and prepare the course of action in detail and acquire/obtain required resources and approval 3.6 Implement the approved risk treatment 3.7 Review risk management processes
4 Complete records and reports	4.1 Effectively communicate accurate information to others on the course of action and implementation 4.2 Complete written records and reports for hazards and actions from personal risk assessment

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIIRIS201B Conduct local risk control

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIIRIS201D Conduct local risk control

Modification History

Release	Comment
1	This unit replaces RIIRIS201B Conduct local risk control
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locate and apply relevant documentation, policies and procedures
- works effectively with others to undertake and complete conducting of local risk control including:
 - communicating clearly and concisely with others to receive and clarify treatment information
 - communicating clearly and concisely the likelihood and consequence of an identified risk
- demonstrates completion of conducting local risk control that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying 'unacceptable risk' using the acceptability/unacceptability criteria
 - working with others to determine risk controls
 - assessing and determining consequence and likelihood of potential risk
 - controlling risk by selecting and implementing most appropriate treatment
 - reporting written information about risk assessment and treatment implementation

Knowledge Evidence

The candidate must demonstrate knowledge in conducting local risk control through:

- accessing, interpreting and applying the organisation and site requirements and procedures for:

- organisation risk management policy, procedure requirements
- conducting worksite risk management procedures
- conducting and maintaining worksite communication, reporting and recording procedures
- identifying and assessing hazards, risks, acceptability of risks and controls
- reading, preparing and using worksite safety systems information

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit is best assessed in the context of this sector's work environment;
- where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive	3-6	3 Years

(Quarrying)		
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this Unit is being assessed outside of the Resources and Infrastructure Sectors assessor and/or Industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no Industry standard is specified should comply with any relevant regulation.	

*Assessors can demonstrate current work experience through employment within Industry in a role relevant to the outcomes of the Unit; or, for external assessors this can be demonstrated through exposure to Industry by conducting frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

SIRRINV002 Control stock

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to process stock orders, maintain stock levels, minimise stock losses, manage stocktakes and maintain all documents that relate to the administration of any type of stock.

This unit applies to individuals responsible for stock control. They work within organisational systems and procedures, but make decisions about stock administration and may have responsibility for others.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Inventory

Unit Sector

Retail

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Monitor stock receipt and dispatch.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Implement organisational policies and procedures for receipt, dispatch and secure storage of stock.
- 1.2. Allocate tasks and monitor staff to ensure organisational procedures are followed, and documentation is completed

- correctly.
- 1.3. Confirm that stock quantity and quality inspections on receipt meet organisational standards.
 - 1.4. Act on variations to quantity and quality of delivered stock.
 - 1.5. Supervise safe stock handling and storage.
- 2. Maintain stock records.
 - 2.1. Monitor stock and maintain stock at required levels.
 - 2.2. Maintain, monitor and adjust stock reorder cycles as required.
 - 2.3. Provide clear information to team members about individual stock recording responsibilities.
 - 2.4. Maintain stock storage and movement records.
 - 2.5. Record and report stock discrepancies.
 - 2.6. Monitor stock performance and identify and report fast and slow-selling items.
- 3. Process and follow up orders.
 - 3.1. Process and raise stock orders according to organisational procedures.
 - 3.2. Monitor delivery of stock to ensure agreed deadlines and inventory requirements are met.
 - 3.3. Liaise with suppliers to ensure continuity of supply.
 - 3.4. Resolve routine supply problems or refer to appropriate personnel for action.
 - 3.5. Distribute stock within the organisation according to required allocations.
 - 3.6. Handle routine supply problems or refer to management as required by store policy.
- 4. Minimise stock losses.
 - 4.1. Regularly check storage of stock and ensure its protection.
 - 4.2. Identify, record and report stock losses.
 - 4.3. Identify avoidable losses and establish reasons for them.
 - 4.4. Recommend solutions and implement procedures to prevent future losses.
- 5. Coordinate stocktake or cyclical count.
 - 5.1. Explain procedures for stocktake and cyclical counts to team members.
 - 5.2. Allocate stocktaking tasks to individual team members ensuring effective use of staff resources to complete task.
 - 5.3. Provide team members with clear directions for performance of each task.
 - 5.4. Produce accurate reports for management on stocktake data, including discrepancies.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	interpret supplier purchasing agreements, purchase orders, records of incoming stock and organisational policies and procedures for stock control.
Numeracy skills to:	- calculate: - supplier costs and complex order costs - complex details of stock on hand and stock losses and produce complex numerically-based reports - reconcile incoming stock and invoices against purchase orders.
Technology skills to:	use business technology for inventory management.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRRINV002 Control stock

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- maintain and order stock across one stock cycle according to organisational procedures using all of the following stock processes:
 - receipt
 - dispatch
 - ordering
 - stock level monitoring
 - records maintenance
- produce three different stock control reports
- organise and coordinate one stocktake or cyclical count
- provide clear and correct information to team members involved in stock control processes.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for:
 - receipt and dispatch of goods, including inspection for quantity and quality
 - stock ordering and reordering
 - stock replenishment
 - stock rotation
 - reporting of stock discrepancies, damage and loss
 - safe transport, handling and storage of goods
 - stock control
 - stocktaking and cyclical counts
 - pricing, labelling and packaging
 - stock security
- key aspects of legislation and codes of practice relevant to stock control:
 - Australian Consumer Law
 - Work Health and Safety (WHS)

- manual handling
- licensing for mechanical movement of stock
- principles of stock control:
 - rotation and replenishment
 - product life cycle
- impact of business planning and sales forecasts on stock control
- types of stock control systems used in the sector
- reasons for stock loss and damage and methods to control these and protect stock.

Assessment Conditions

Skills must be demonstrated in a retail environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- current plain English regulatory documents distributed by government regulators outlining key aspects of legislation and codes of practice relevant to stock control as listed in Knowledge Evidence
- a computerised stock control system
- stock for use in stock control activities
- organisational policies and procedures for stock control
- team members; these can be:
 - individuals in an industry workplace, or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRRMER001 Produce visual merchandise displays

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to display retail merchandise. It requires the ability to prepare, produce and maintain merchandise displays in accordance with visual merchandising requirements.

This unit applies to all businesses that sell retail merchandise. It applies to frontline personnel who have limited autonomy and work under close supervision and guidance of others in frontline operational roles. However; in smaller businesses, senior personnel might also undertake this function.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Merchandising

Unit Sector

Retail

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Prepare to produce visual merchandise display.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1.Review visual merchandising display guidelines, and seek clarification as required.
- 1.2.Obtain merchandise, materials and equipment required for

- the display.
- 1.3. Prepare product labels and price tickets from in-house documents and according to organisational requirements.
 - 1.4. Unpack merchandise according to manufacturer instructions.
2. Display merchandise.
- 2.1. Produce display following visual merchandising display guidelines.
 - 2.2. Ensure merchandise is displayed according to manufacturer instructions where specific requirements for display and storage exist.
 - 2.3. Display merchandise labels and price tickets according to organisational requirements.
 - 2.4. Handle and move stock and equipment according to safe manual handling guidelines to prevent injury to self.
 - 2.5. Promptly return excess stock to storage area, and store according to organisational requirements.
 - 2.6. Check and ensure area around the display remains clear of debris.
3. Maintain display.
- 3.1. Review displays against visual merchandising display guidelines, and refine as required.
 - 3.2. Maintain clear and correct product and pricing information for merchandise.
 - 3.3. Identify damaged or out of date stock, and remove from display as required.
 - 3.4. Rotate and replenish merchandise to maintain optimum stock levels.
 - 3.5. Monitor the display regularly to maintain appearance and cleanliness of display and display area.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

Reading skills to:	• interpret plain English documents that outline organisational policies and procedures related to display of merchandise.
Numeracy skills to:	• estimate dimensions of display areas and appropriate size of displays from display documentation.
Planning and organising skills to:	• prepare for display and complete display activities in a logical and time-efficient sequence.
Technology skills to:	• prepare product labels and price tickets.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRRMER001 Produce visual merchandise displays

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- follow merchandising display guidelines and organisational procedures to prepare and produce three merchandise displays, from the following list, of varying sizes and complexities:
 - an existing merchandise range
 - a new merchandise range
 - a seasonal merchandise range
 - a promotional event
 - discounted merchandise
- maintain each of the above displays and display area, adequate stock level and appearance of display.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- basic principles of visual merchandising as they relate to producing retail visual merchandise displays
- visual merchandise display guidelines and how they are used in creating a retail displays
- organisational procedures for:
 - correct manual handling techniques for protection of self and merchandise
 - correct storage of merchandise and equipment
 - damaged or out of date stock
 - maintenance of display areas
 - merchandise rotation and replenishment
 - product labelling and pricing
 - unpacking merchandise.

Assessment Conditions

Skills must be demonstrated in a retail environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- a range of retail merchandise
- display areas
- retail display equipment and props
- product labels and price tickets
- ticketing and pricing equipment
- organisational visual merchandise display guidelines
- organisational procedures for:
 - manual handling techniques for protection of self and merchandise
 - storage of merchandise and equipment
 - damaged or out of date stock
 - maintenance of display areas
 - merchandise rotation and replenishment
 - product labelling and pricing
 - unpacking merchandise
- assessment activities that allow the individual to:
 - work within commercial speed, timing and productivity
 - manage tasks and contingencies in the context of the job role.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRRMER002 Merchandise food products

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to prepare and maintain the display of food products.

It applies to individuals working in frontline operational roles in a diverse range of retail industry sectors and business contexts that sell food products. They operate with some independence under general supervision and guidance from others, and within established organisational policies and procedures.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Merchandising

Unit Sector

Retail

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Prepare to produce food display.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Review organisational food display guidelines for display of food products, and seek clarification as required.
- 1.2. Clean and sanitise food display equipment, and check for defects including irregularities in temperature as required.

- 1.3. Use personal protective equipment and correct equipment for handling food products as required.
 - 1.4. Follow manufacturer instructions to ensure correct handling and display of food.
 - 1.5. Follow food safety requirements to ensure food safety at all times of handling and display.
 - 1.6. Unpack food and check it is fit for purchase according to organisational policies and procedures.
 - 1.7. Prepare product labels and price tickets for food display according to organisational policies and procedures.
 - 1.8. Wrap, package or plate food items as required.
2. Display food products.
 - 2.1. Produce food display following organisational display guidelines for the display of food products.
 - 2.2. Identify and use correct handling and display techniques according to food characteristics and organisational policies and procedures.
 - 2.3. Ensure correct pricing and labelling of food displays.
 - 2.4. Promptly return excess stock to storage area, and store in accordance with organisational policies and procedures.
3. Maintain food display.
 - 3.1. Maintain cleanliness of display areas ensuring products are displayed neatly and excess packaging is removed.
 - 3.2. Maintain optimum stock levels and replenish stock as required.
 - 3.3. Identify damaged, deteriorated, spoiled or out of date food and reset or remove as required.
 - 3.4. Monitor correct temperatures for food display as required and report temperature irregularities to appropriate personnel without delay.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	interpret plain English documents that outline organisational procedures relevant to merchandising food.
Numeracy skills to:	interpret temperature readings against requirements for food display.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRRMER002 Merchandise food products

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- follow organisational food display guidelines to prepare and produce four different food displays of varying sizes and complexities
- prepare and display two of the following food types for the above four displays:
 - fresh food produce
 - baked food items
 - general grocery items
 - food items requiring packaging
 - food items requiring specific temperature control.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for:
 - food safety
 - hygiene and sanitation
 - food display labelling and pricing
 - correct storage of stock
 - location of display areas
 - principles of display
 - availability and use of display materials
 - stock rotation
 - stock replenishment
 - damaged and out of date stock
 - scheduling, building and rotating displays
 - correct manual handling techniques for protection of self and merchandise
 - maintenance and cleaning of equipment and working areas
- food safety monitoring:
 - storing food in appropriate timeframes

- monitoring and recording food temperatures
- monitoring and recording temperature of storage equipment
- visually examining food for quality review
- food safety requirements as specific to food products displayed
- food product characteristics and required preparation and handling
- techniques for creating visually appealing food displays that attract customers and maximise sales.

Assessment Conditions

Skills must be demonstrated in a retail environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- food products for display as selected in the Performance Evidence
- display areas
- display equipment and props for:
 - cleaning equipment and materials
 - food preparation and handling
- personal protective equipment and clothing
- product labels and price tickets
- ticketing and pricing equipment
- organisational food display guidelines
- relevant documentation:
 - organisational policies and procedures as listed in the Knowledge Evidence
 - food safety guidelines as applicable to specific food products.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRRRTF001 Balance and secure point-of-sale terminal

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to balance and reconcile a register or terminal in a retail environment, clear registers, count money, calculate non cash transactions, and reconcile and record takings.

It applies to individuals working in frontline operational roles in a diverse range retail industry sectors and business contexts. They operate with some independence under general supervision and guidance from others, and within established organisational policies and procedures.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Retail Financials

Unit Sector

Retail

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Balance and secure takings.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1.Perform register or terminal balance at designated times.
- 1.2.Separate cash float from takings prior to balancing and secure takings.

- 1.3. Supply change to register or terminal and accurately record.
 - 1.4. Obtain and interpret register or terminal reading or print-out.
 - 1.5. Secure cash and non cash documents according to organisational procedures.
2. Reconcile takings.
 - 2.1. Count cash accurately.
 - 2.2. Calculate non cash documents accurately.
 - 2.3. Determine balance between register or terminal reading and sum of cash and non cash transactions.
 - 2.4. Investigate or report discrepancies between register or terminal reading and sum of cash and non cash transactions to relevant personnel.
 - 2.5. Record takings and file records according to organisational procedures.

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRRRTF001 Balance and secure point-of-sale terminal

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- consistently apply organisational policies and procedures to:
 - balance a register or terminal on three occasions with complete accuracy
 - reconcile three different sets of takings comprising both cash and non-cash with complete accuracy
 - identify and resolve three different types of balancing discrepancies
 - process three different types of takings according to organisational policies and procedures.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- role and importance of the balancing process
- techniques for identifying and resolving discrepancies
- functions and procedures for operating point-of-sale equipment:
 - opening and closing
 - balancing
 - clearance of terminal and transference of tender
 - recording takings
 - consumables required by system
 - security
- cash handling procedures:
 - counting cash
 - handling cash floats
 - change required, denominations of change and tendering change
 - security
- organisational policies and procedures for non-cash transactions:
 - credit cards
 - EFTPOS

- vouchers
- organisational policies and procedures for:
 - exchanges
 - refunds
 - lay-by
 - cash handling
 - cash float
 - operation of point-of-sale equipment
 - register or terminal balance
 - security of cash and non cash transactions.

Assessment Conditions

Skills must be demonstrated in a retail environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- organisational policies and procedures related to point-of-sale
- point-of-sale equipment and consumables
- financial transaction documentation for non-cash sales
- cash
- assessment activities that allow the individual to work with commercial speed, timing and productivity.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRXPDK001 Advise on products and services

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to develop product and service knowledge and provide information to customers.

This unit applies to individuals working in frontline customer service and sales roles in a diverse range of industry and business contexts. They operate with some independence under general supervision and guidance from others, and within established organisational policies and procedures.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Product Knowledge

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Develop product and service knowledge.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Identify and access sources of information on products and services.
- 1.2. Interpret information about availability, features and benefits of products and services.

	1.3.Compare products and services based on product information.
	1.4.Identify and use opportunities to update knowledge for the product and service range.
2. Respond to customer requests.	2.1.Answer customer questions about products and services with current and accurate information.
	2.2.Use questions to clarify customer information needs.
	2.3.Explain product and service details using clear communication.
	2.4.Source additional information when answer to customer request is unknown or refer to relevant colleagues.
3. Enhance information provided.	3.1.Identify situations where additional information may assist the customer.
	3.2.Advise on alternative products or services that may meet customer needs when requested item is not available.
	3.3.Recommend complementary products, specials, new lines and promotions to customers according to their needs.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS

DESCRIPTION

Numeracy skills to:

- interpret pricing information.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRXPDK001 Advise on products and services

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- access and interpret sources of information on four different products or services
- respond to four different customer inquiries for product or service information that individually or cumulatively require provision of information on all of the following:
 - features and benefits
 - price
 - alternative products or services
 - complementary products or services.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for:
 - interactions with customers
 - product or service pricing
- basic key aspects of legislation that impact provision of information for the product or service range:
 - Australian Consumer Law
 - product or service specific legislation
- interpersonal communication techniques:
 - active listening and questioning
 - communication methods which convey information clearly and concisely
- product and service information for the product or service range:
 - features and benefits
 - price
 - care and handling of products
 - availability
 - storage requirements, shelf life and use by date
 - warranties

- ingredients or materials contained in product
- origins
- alternative products and services
- complementary products and services.

Assessment Conditions

Skills must be demonstrated in a services industries environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- a product or service range
- sources of product information
- relevant documentation:
 - current plain English regulatory documents distributed by government regulators outlining factors that impact provision of information for the product or service range
 - price lists
 - organisational policies and procedures relevant to product and service advice
- customers; these can be:
 - customers in an industry workplace, or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRXRSK001 Identify and respond to security risks

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to identify security risks related to customers, team members, merchandise and money, and take appropriate action, within scope of job role, to eliminate or minimise those risks.

It applies to individuals at all levels working in frontline roles in a diverse range of industry sectors and business contexts.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Risk Management and Security

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Identify potential security risks.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Identify potential risks to merchandise, cash and non-cash, and take swift action to prevent escalation of security risk in line with organisational procedures.
- 1.2. Identify potential risks to safety of customers, self or team members, and take swift action to prevent escalation of security

- risk in line with organisational procedures.
- 1.3. Remain vigilant and alert to potential security risks, and follow organisational policies and procedures to minimise security risks.
 - 1.4. Maintain security of merchandise, cash and non-cash according to organisational procedures.
2. Respond to security breaches.
 - 2.1. Identify security breaches and respond in line with organisational policies and procedures.
 - 2.2. Recognise security breaches outside of scope responsibility and promptly refer to relevant personnel.
 - 2.3. Prioritise personal safety when responding to security breaches.
 3. Report on security issues.
 - 3.1. Report suspicious behaviour to relevant personnel.
 - 3.2. Report faulty security equipment to relevant personnel.
 - 3.3. Report on security breaches and ongoing security risks in line with organisational policies and procedures.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Writing skills to:	• complete basic written reports regarding security breaches.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRXRSK001 Identify and respond to security risks

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- follow organisational policies and procedures to demonstrate the appropriate response, within scope of job role, to four of the following security issues:
 - faulty security equipment
 - suspicious customer behaviour
 - suspicious team member behaviour
 - breaches of cash handling security procedures
 - breaches of merchandise movement security procedures
 - theft of cash
 - theft of merchandise
 - armed robbery
 - individual posing threat to personal safety
- identify potential security risks within the workplace and determine appropriate measures to eliminate the risk.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for:
 - use of security equipment
 - suspicious customer behaviour
 - suspicious team member behaviour
 - armed robbery
 - cash and non-cash security
 - merchandise security
 - theft
 - responding to security breaches
 - reporting security risks and breaches
 - surveillance of merchandise

- personal security
- common security risks within the retail workplace and techniques to:
 - identify risk
 - minimise risk
- impacts of security breaches on individuals and organisation:
 - emotional distress
 - financial loss
 - commercial loss.

Assessment Conditions

Skills must be demonstrated in a services industry environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- organisational policies and procedures relevant to security as listed in the Knowledge Evidence
- customers and team members; these can be:
 - individuals in an industry workplace, or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment
- assessment activities that allow the individual to work with commercial speed and timing.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRXRSK002 Maintain store security

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to maintain store security in a retail environment.

It applies to individuals working in frontline management roles in a diverse range of industry sectors and business contexts. They operate independently with some responsibility for others and decision making, and within established organisational policies and procedures.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Risk Management and Security

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Monitor and maintain store security.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Implement organisational policies and procedures to ensure store security is maintained.
- 1.2. Monitor and review security procedures continually and act on opportunities to improve store security.
- 1.3. Maintain security of merchandise, cash, points of sale and

- keys.
- 1.4.Ensure store security equipment is used and in correct working order.
- 1.5.Report matters impacting store security to relevant personnel.
- 1.6.Document breaches of security as required.
- 2. Facilitate security awareness.
 - 2.1.Inform team members of organisational policies and procedures for security.
 - 2.2.Provide team members with feedback on their implementation or non-implementation of security procedures.
 - 2.3.Provide team members with ongoing supervision and training to facilitate security awareness.

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRXRSK002 Maintain store security

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- maintain store security over three different work shifts by:
 - monitoring adherence to organisational security policies and procedures
 - responding to two occurrences of non-adherence to security policies and procedures
 - communicating security policies and procedures to one team member
 - ensuring security equipment is utilised and in correct working order
 - reporting on opportunities for improved store security.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for:
 - use of security equipment
 - suspicious customer behaviour
 - suspicious team member behaviour
 - armed robbery
 - cash and non-cash security
 - merchandise security
 - theft
 - responding to security breaches
 - reporting security risks and breeches
 - surveillance of merchandise
 - personal security
 - general store security
 - team members' security training
 - security for opening and closing premises
 - reporting problems and faults
 - security of visitors, sales representatives, contractors and vendors
 - security risks likely to endanger customers or team members

- legislation as relevant to store security and own level of responsibility:
 - privacy laws
 - Australian Consumer Law
 - reporting procedures
- impacts of security breaches on individuals and organisation:
 - emotional distress
 - financial loss
 - commercial impacts
- common security risks within the retail workplace and techniques to:
 - identify risk
 - minimise risk
- types of store alarms and security systems used in industry.

Assessment Conditions

Skills must be demonstrated in a services industry environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- relevant equipment:
 - alarm systems
 - surveillance equipment
 - point-of-sale equipment
 - communication equipment
- relevant documentation:
 - current plain English regulatory documents distributed by government regulators legislation as relevant to store security and own level of responsibility as listed in Knowledge Evidence
 - organisational policies and procedures as listed in the Knowledge Evidence
- customers and team members; these can be:
 - individuals in an industry workplace, or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRXSL001 Sell to the retail customer

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to deliver quality customer service and sell to retail customers. It requires the ability to determine customer needs, match products and services to their needs, and facilitate a sale.

This unit applies to all retail sectors and business sizes from large format stores to small independents. It applies to retail personnel at all levels who play a role in engaging with customers with the purpose of selling.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Sales

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Establish customer needs.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Connect with the customer within designated response times and establish rapport.
- 1.2. Use questioning and active listening to facilitate effective two-way communication.

- 1.3. Observe and determine appropriate level of interaction based on customer verbal and non-verbal cues.
 - 1.4. Determine and clarify customer preferences, needs and expectations.
2. Provide advice on products and services.
 - 2.1. Use product and service knowledge to tailor options to specific customer needs, and offer alternatives when product is unavailable.
 - 2.2. Clearly explain and promote product and service features and benefits where relevant.
 - 2.3. Advise on promotional events where relevant.
 - 2.4. Provide additional information to address customer questions and objections.
 - 2.5. Offer comparisons to competitor product or service range as required.
 - 2.6. Collaborate with the customer to determine product or service option most suited to their needs.
 - 2.7. Take opportunities to upsell and cross sell products and services that enhance customer request and maximise profitability of sale.
3. Facilitate the sale of products and services.
 - 3.1. Select and use appropriate techniques to close sale.
 - 3.2. Direct the customer to designated point-of-sale and process sale, as required, according to organisational procedures.
 - 3.3. Farewell customer on leaving, and invite to return.
 - 3.4. Provide any required after sales service according to organisational procedures.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

- Reading skills to:
- interpret:
 - detailed in-house and supplier product information documents
 - plain English documents that outline organisational customer service policy and procedures.
- Numeracy skills to:
- interpret basic fee information from in-house documents and complete basic pricing calculations.
- Problem-solving skills to:
- respond to customer objections and provide appropriate solutions to satisfy customer needs.
- Technology skills to:
- use technologies equipped with search functionality and information systems to source product and service information.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRXSL001 Sell to the retail customer

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- interact with four different retail customers to initiate and close the sale of different retail products or services
- demonstrate the following during the above customer interactions:
 - appropriate communication
 - establishment and clarification of customer needs, wants and expectations
 - product and/or service knowledge
 - appropriate sales approach to sell benefits and features of products and/or services
 - overcome objections and close sales
 - upsell and/or cross sell additional products and/or services that complement the sale
 - promotion of customer loyalty and repeat sales.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- appropriate body language for customer service
- basic principles of positive customer service and sales
- open and closed questioning techniques related to the sale of product and services
- verbal and non-verbal cues indicating customer understanding of information
- techniques for effective communication with customers of diverse backgrounds:
 - cultural diversity
 - special needs
- sales techniques:
 - opening techniques
 - recognising buying signals
 - strategies to focus customer on specific products and services
 - selling add-ons and complementary products
 - overcoming customer objections
 - closing techniques

- primary components of consumer protection laws that relate to selling products and services, especially organisational responsibility for supplying products and services as described or substituting suitable products and services when unable
- primary components of privacy law, and actions that retail business must take to protect privacy of customer information
- for the specific retail sector:
 - professional service standards and protocols for retail industry personnel
 - attitudes and attributes expected by the retail industry to work with customers
 - different customer service needs and expectations
- for the particular retail organisation:
 - product and service knowledge:
 - product and service range offering
 - product specifications, features and benefits
 - designated response times for providing customer service
 - customer service procedures including recording of and storing customer details.

Assessment Conditions

Skills must be demonstrated in a retail environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- relevant documentation:
 - organisational policies and procedures for:
 - customer service
 - sale of products and services
 - resolving customer complaints
 - collection and storage of customer details
 - organisational product information and price lists
 - supplier brochures, information sheets and price lists
 - promotional activity information
 - current plain English regulatory documents distributed by government regulators for:
 - consumer protection law
 - privacy law
- customers with whom the individual can interact to sell products and services; these can be:
 - individuals in an industry workplace, or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation

- assessment activities that allow the individual to:
 - work within commercial speed, timing and productivity
 - manage tasks and contingencies in the context of the job role.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SIRXSL002 Follow point-of-sale procedures

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to follow point-of-sale work systems, process transactions and complete sales.

It applies to individuals working in frontline operational roles in a diverse range of industry sectors and business contexts. They operate with some independence under general supervision and guidance from others, and within established organisational policies and procedures.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Sales

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Follow point of sale work systems.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1.Open and close point-of-sale terminal at designated times and according to organisational procedures.
- 1.2.Clear point-of-sale terminal and transfer cash.
- 1.3.Handle cash according to organisational policies and

- procedures.
- 1.4.Maintain supplies of change at agreed levels in point-of-sale terminal to agreed levels.
 - 1.5.Maintain adequate supplies of consumables.
2. Process point-of-sale transactions.
 - 2.1.Identify transaction type and required procedure to be followed.
 - 2.2.Correctly interpret sale price information.
 - 2.3.Make accurate calculations for pricing and collection of payment.
 - 2.4.Enter accurate sale information into point-of-sale equipment.
 - 2.5.Confirm price to customer and check customer payment against sale value.
 - 2.6.Provide correct change for cash payments.
 - 2.7.Identify transaction errors, follow procedures for resolution and complete accurate records.
 3. Complete sales.
 - 3.1.Generate and complete documentation associated with the sale.
 - 3.2.Confirm and process any purchase follow up activities.
 - 3.3.Acknowledge and thank customer in line with organisational policy.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Numeracy skills to:	• interpret numerical information from various sources and calculate accurately with or without the use of a calculator. • measure or estimate quantities to calculate costs. • calculate percentage discounts.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

Assessment Requirements for SIRXSL002 Follow point-of-sale procedures

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- follow procedures for set up, maintenance and close of point-of-sale area/terminal on three different occasions
- perform three point-of-sale transactions for each of the following:
 - cash sales
 - non-cash sales
- perform three point-of-sale transactions for each of the following:
 - refunds
 - exchanges
- make six accurate financial calculations relating to product pricing that individually or cumulatively involve:
 - multiple products
 - products of varying prices
 - products with percentage discounts
- follow procedures to complete four sales that require post purchase activity.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- organisational policies and procedures for:
 - exchanges
 - refunds
 - lay-by
- basic key aspects of legislation that impact point-of-sale activities:
 - Australian Consumer Law
- features of products sold by the organisation
- functions and procedures for operating point-of-sale equipment:
 - opening and closing
 - clearance of terminal and transference of tender

- recording takings
- consumables required by system
- security
- cash handling procedures:
 - counting cash
 - handling cash floats
 - change required, denominations of change and tendering change
 - security
- procedures for non-cash transactions:
 - credit cards
 - EFTPOS
 - vouchers
- types of purchase follow up activities and associated organisational policies and procedures:
 - placing of orders
 - delivery
 - issuing of invoices
 - issuing of receipts
 - wrapping and packing.

Assessment Conditions

Skills must be demonstrated in a service industries environment. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- organisational policies and procedures for point-of-sale activities
- current plain English regulatory documents distributed by government regulators outlining key aspects of legislation that impact point-of-sale activities as listed in the Knowledge Evidence
- point-of-sale equipment and consumables
- financial transaction documentation for non-cash sales
- cash
- assessment activities that allow the individual to work with commercial speed, timing and productivity.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ca051b1b-5101-4ec2-ac1c-49699303188d>

SITHFAB005 Prepare and serve espresso coffee

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to extract and serve espresso coffee beverages using commercial espresso machines and grinders. It requires the ability to advise customers on coffee beverages, select and grind coffee beans, prepare and assess espresso coffee beverages and to use, maintain and clean espresso machines and grinders. Complex repairs of equipment would be referred to specialist service technicians.

Preparation of coffee beverages using other methods is covered in SITHFAB004 Prepare and serve non-alcoholic beverages.

This unit applies to any hospitality organisation that serves espresso coffee beverages, including cafes, restaurants, bars, clubs, function and event venues.

It applies to espresso machine operators who operate with some level of independence and under limited supervision.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

SITXFSA001 Use hygienic practices for food safety

Competency Field

Food and Beverage

Unit Sector

Hospitality

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Organise coffee workstation.

2. Select and grind coffee beans.

3. Advise customers and take espresso coffee orders.

4. Extract and monitor quality of espresso.

5. Undertake milk texturing process.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1. Complete mise en place for coffee service to enable efficient work flow and easy access to ingredients, equipment, and service-ware.
- 1.2. Place ingredients in correct containers and conditions to maintain freshness.
- 1.3. Prepare espresso machine and grinder for service according to manufacturer instructions.
- 2.1. Select coffee beans and grind to appropriate particle size according to relevant factors.
- 2.2. Complete test extractions before service to ensure correct particle size of grind, and assess and adjust according to relevant factors.
- 2.3. Adjust grind regularly throughout the service period according to relevant factors.
- 2.4. Monitor efficiency of grinder for correct dose and grind during use, and resolve or report issues.
- 2.5. Clean grinder as required during or after the service period.
- 3.1. Provide information and recommendations about types of coffee beverages and accompaniments.
- 3.2. Identify customer preferences and take orders.
- 4.1. Select and prepare appropriate service-ware.
- 4.2. Select correct filter basket and clean, dry and dose it with required amount of ground coffee.
- 4.3. Tamp ground coffee to make even and level cake.
- 4.4. Flush group head before attaching group handle to extract espresso.
- 4.5. Monitor quality of extraction during service period and make adjustments.
- 4.6. Monitor efficiency of espresso machine during service, and resolve or report issues.
- 5.1. Select cold milk and appropriate milk foaming jug to fulfil customer orders.
- 5.2. Purge the steam wand every time before texturing.
- 5.3. Texture milk according to type of milk and coffee beverage.
- 5.4. Visually and aurally monitor and adjust the texture and temperature.

- 5.5.Clean the steam wand on the outside and purge every time after texturing.
 - 5.6.Combine foam and milk through swirling, ensuring even consistency.
 - 5.7.Pour milk immediately after swirling, according to the coffee beverage.
6. Serve espresso coffee beverages.
 - 6.1.Present coffee beverages attractively and without drips and spills.
 - 6.2.Serve coffee beverages promptly at the required temperature and with appropriate accompaniments.
 - 6.3.Minimise waste to maximise profitability of beverages produced.
7. Clean espresso equipment.
 - 7.1.Clean espresso machine and equipment thoroughly and safely according to organisational procedures and manufacturer instructions.
 - 7.2.Maintain water filtration system according to organisational procedures.
 - 7.3.Refer faults and maintenance issues requiring technical specialists to supervisor.
 - 7.4.Use energy and water resources efficiently when preparing coffee beverages and cleaning to reduce negative environmental impacts.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	- interpret organisational documents or diagrams that relate to: - safety data sheets (SDS) and product instructions for cleaning chemicals - organisational procedures for operating, cleaning and maintaining equipment - read beverage menus and standard recipes for espresso coffee beverages.
Writing skills to:	write orders and basic notes on customer preferences.
Oral communication skills to:	use active listening and open and closed probe questioning to determine customer preferences and offer suitable products.

Numeracy skills to:	visually estimate amounts of milk and make adjustments to doses of ground coffee.
Problem-solving skills to:	- identify deficiencies in espresso extraction and make adjustments to ensure a quality product - monitor operational efficiency of espresso machine and adjust use during coffee beverage preparation.
Planning and organising skills to:	sequence the preparation of beverages and their components to efficiently serve customers.
Technology skills to:	use coffee grinders and espresso machines, identifying faults and maintenance issues as they arise.

Unit Mapping Information

SITHFAB204 Prepare and serve espresso coffee

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

Assessment Requirements for SITHFAB005 Prepare and serve espresso coffee

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- prepare and present each of the following espresso-based coffee beverages on three different occasions within commercial timeframes:
 - caffe latte
 - cappuccino
 - espresso (short black)
 - flat white
 - long black
 - piccolo latte
 - mocha
 - ristretto
 - short and long macchiato
- monitor quality indicators for extraction as listed in the knowledge evidence during preparation of the above espresso coffee beverages and make adjustments to restore extraction to required standard
- present the above espresso coffee beverages and accompaniments demonstrating consistency and quality of:
 - appearance
 - aroma
 - body
 - crema on top of the espresso
 - flavour
 - taste
 - strength
 - volume
- use the correct equipment, ingredients and measures to prepare the above espresso coffee beverages.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- major types and characteristics of espresso coffee beverages specified in the performance evidence
- different types of milk, their characteristics and uses for different types of coffee beverages
- characteristics of different types of beans, blends and roasts
- mise en place requirements for preparing coffee beverages
- methods and techniques for preparing and serving espresso coffee beverages:
 - grinding coffee beans
 - measuring dose by sight, electronically, manually and mechanically
 - tamping
 - extracting espresso
 - texturing milk
 - sequencing orders for the preparation of coffee beverages
- quality indicators for espresso coffee extraction:
 - changes in colour of crema
 - changes in flow texture
 - cake of used ground coffee
 - water pressure during extraction
- available options to meet specific customer preferences relating to:
 - accompaniments
 - blends
 - service-ware
 - strength
 - sweeteners
 - type of:
 - beans
 - milk
- factors relevant to quality of espresso coffee:
 - ambient humidity
 - consistency of used coffee grounds
 - crema on top of the espresso
 - quality and rate of espresso flow
 - steam pressure during foaming and steaming of milk
 - taste
- extraction rates for the different espresso coffee beverages specified in the performance evidence

- how and when adjustments are required to the following to ensure quality of espresso coffee:
 - dose
 - grind
 - tamping technique
 - water flow
 - water pressure
- organisational procedures and industry standards for:
 - service-ware used for espresso coffee beverage presentation
 - accompaniments used to enhance beverages
 - presentation of beverages:
 - latte art
- appropriate environmental conditions for storing coffee beans, ground coffee, milk and other ingredients to:
 - ensure food safety
 - optimise shelf life
- essential features and functions of different espresso machines and grinders used to prepare espresso coffee beverages:
 - sizes and types of filter baskets and tampers
 - purging the steam wand
 - flushing the group head
 - cleaning and maintenance methods and procedures
 - symptoms of faults in espresso machines and grinders
 - safe operational practices and dangers of working with steam
- basic maintenance and cleaning methods for espresso grinders, machines and equipment:
 - back flushing the machine
 - brushing out doser chamber
 - pouring hot water to clean drainage pipes
 - using correct and environmentally sound disposal methods for coffee making waste
 - washing drip trays
 - washing and drying:
 - bean hopper
 - group handle and filter basket
 - wiping down entire machine
 - wiping outside of steam wand and nozzle and purging inside with steam
- content of safety data sheets (SDS) for cleaning agents and chemicals, or workplace documents or diagrams that interpret the content of SDS.

Assessment Conditions

Skills must be demonstrated in an operational food and beverage outlet. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- fixtures and large equipment:
 - workstation with industry current commercial grade espresso machine and coffee grinders
 - bins or knock boxes for used coffee grounds
 - storage bins
- small equipment:
 - blind or blank filter basket
 - cleaning brushes
 - colour coded cleaning cloths
 - flat edge implement for levelling off dosed filter basket
 - measuring equipment:
 - stopwatch or timer
 - thermometer
 - milk foaming jugs
 - napkins
 - powder shakers
 - service trays
 - spoons and stirrers
 - straws
 - service-ware for different types of coffee beverages:
 - cups: espresso and standard
 - saucers
 - mugs
 - glasses
 - take-away coffee cups and lids
 - take-away cardboard trays
 - tamp mats
 - tampers
- stock:
 - commercial range of coffee beans, ground coffee and other ingredients and accompaniments
- organisational specifications:
 - equipment manufacturer instructions
 - cleaning and maintenance procedures for espresso coffee machines and grinders
 - commercial beverage menus

- organisational procedures and industry standards for presenting espresso coffee beverages
- price lists
- standard recipes for coffee beverages currently used by the hospitality industry
- SDS for cleaning chemicals or plain English workplace documents or diagrams that interpret the content of SDS
- industry-realistic ratio of staff to customers; these can be:
 - customers in an industry workplace during the assessment process; or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors; and:

- have worked in industry for at least three years where they have applied the skills and knowledge of this unit of competency.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

SITHPAT005 Produce petits fours

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to produce, using standard recipes, specialised petits fours which require finishing, decoration and presentation of a high order. It requires the ability to select, prepare and portion ingredients and to use equipment and a range of cookery methods to make, fill, assemble and decorate specialised petits fours.

The unit applies to hospitality and catering organisations that produce and serve specialised patisserie products, including hotels, restaurants and patisseries.

It applies to patissiers who usually work under the guidance of more senior chefs.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

SITXFSA001 Use hygienic practices for food safety

Competency Field

Patisserie

Unit Sector

Hospitality

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the Performance criteria describe the performance needed to demonstrate

- essential outcomes. achievement of the element.
1. Select ingredients.
 - 1.1. Confirm food production requirements from food preparation list and standard recipes.
 - 1.2. Calculate ingredient amounts according to requirements.
 - 1.3. Identify and select ingredients from stores according to recipe, quality, freshness and stock rotation requirements.
 2. Select, prepare and use equipment.
 - 2.1. Select type and size of equipment suitable to requirements.
 - 2.2. Safely assemble and ensure cleanliness of equipment before use.
 - 2.3. Use equipment safely and hygienically according to manufacturer instructions.
 3. Portion and prepare ingredients.
 - 3.1. Sort and assemble ingredients according to food production sequencing.
 - 3.2. Weigh and measure wet and dry ingredients according to the recipe and quantity of petits fours required.
 - 3.3. Minimise waste to maximise profitability of petits fours produced.
 4. Cook bases, fillings and coatings.
 - 4.1. Use cookery methods for bases, fillings and coatings to achieve desired product characteristics.
 - 4.2. Follow standard recipes and make **food quality adjustments** within scope of responsibility.
 - 4.3. Pipe a selection of small choux paste shapes.
 - 4.4. Prepare and blind bake sweet paste in small moulds or tins in a variety of shapes.
 - 4.5. Select baking conditions, required oven temperature and bake petit four bases.
 - 4.6. Cool bases in appropriate conditions to retain optimum freshness and product characteristics.
 5. Prepare iced petits fours.
 - 5.1. Cut sponges and bases into a variety of shapes.
 - 5.2. Fill and assemble petits fours according to standard recipe specifications.
 - 5.3. Prepare icing at the correct temperature.
 - 5.4. Ice petits fours with icing of a consistency that achieves required coating thickness and surface gloss.
 - 5.5. Apply icing to ensure a smooth and seamless finish.
 - 5.6. Design and use decorations that enhance flavour and appeal.
 6. Prepare fresh petits fours.
 - 6.1. Select pre-cooked small choux and sweet pastry shapes.
 - 6.2. Fill and assemble fresh petits fours according to standard recipe specifications.
 - 6.3. Use appropriate garnishes, glazes and finishes to enhance flavour and visual appeal.
 7. Prepare marzipan petits fours.
 - 7.1. Flavour and colour marzipan according to the recipe and soften with egg whites if required.

	7.2.Pipe or model marzipan by hand or shape with the aid of moulds to produce mini-size fruits.
	7.3.Seal marzipan fruits with cocoa butter or food lacquer using applied heat to preserve desired eating characteristics.
8. Prepare caramelised petits fours.	8.1.Select and coat fresh fruits or fruit segments with pale amber coloured caramel.
	8.2.Sandwich dried fruits or nuts or fill with flavoured marzipan and coat with pale amber coloured caramel.
9. Present and store petits fours.	9.1.Visually evaluate petits fours and adjust presentation before displaying.
	9.2.Use suitable receptacles to attractively present petits fours according to organisational standards.
	9.3.Display petits fours in appropriate conditions to retain optimum freshness and product characteristics.
	9.4.Store petits fours in appropriate environmental conditions .
	9.5.Clean work area, and dispose of or store surplus and re-usable by-products according to organisational procedures, environmental considerations, and cost-reduction initiatives.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	- locate information in food preparation lists and standard recipes to determine preparation requirements - locate and read date code and stock rotation labels.
Oral communication skills to:	express opinion about petits fours, advising on most appropriate selection and ingredients.
Writing skills to:	write notes on recipe requirements and calculations.
Numeracy skills to:	determine cooking times and temperatures suitable to the type of petits fours being prepared.
Problem-solving skills to:	- evaluate quality of ingredients and finished petits fours and make adjustments to ensure a quality product - adjust taste, texture and appearance of food products according to identified deficiencies.
Planning and organising skills to:	efficiently sequence the stages of food preparation and production.

Self-management skills • manage own speed, timing and productivity.
to:

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Food quality adjustments must involve consideration of factors relating to:

- ratio of wet to dry ingredients
- taste
- temperature
- texture.

Adjusting presentation must involve consideration of:

- fillings, icings and decorations to maximise visual appeal:
 - balance
 - colour
 - contrast
- plating food for practicality of:
 - customer consumption
 - service
- wiping drips and spills.

Environmental conditions must ensure appropriate:

- atmosphere
- humidity
- light
- packaging
- temperature
- use of containers
- ventilation.

Unit Mapping Information

SITHPAT305 Produce petits fours

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dffa092694>

Assessment Requirements for SITHPAT005 Produce petits fours

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- follow classical and contemporary standard recipes to safely and hygienically produce and decorate two different types of petits fours from each of the following main groups:
 - iced petits fours
 - fresh petits fours
 - marzipan petits fours
 - caramelised petits fours
- use each of the following flavoured fillings at least once when preparing the above petits fours:
 - cream
 - custard
 - ganache
- use each of the following coatings at least once when preparing the above petits fours:
 - caramel
 - cocoa butter
 - food lacquer
- use each of the following decorations at least once when decorating the above petits fours:
 - chocolate
 - fresh fruits
 - glazes
- use appropriate preparation and cookery methods from the list in the knowledge evidence when producing the above petits fours
- prepare above petits fours:
 - that are consistent in quality, size, shape and appearance
 - within commercial time and cost constraints and deadlines
 - reflecting required quantities to be produced
 - following procedures for portion control and food safety practices when handling and storing petits fours
 - responding to special customer requests and dietary requirements.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- culinary terms and trade names for:
 - ingredients commonly used to produce petits fours
 - classical and contemporary petits fours specified in the performance evidence
- contents of stock date codes and rotation labels
- preparation and cookery methods used when producing petit four fillings, coatings and decorations listed in the performance evidence:
 - adding fats and liquids to dry ingredients
 - adding flavourings or colourings
 - blind baking sweet paste in small moulds
 - piping of choux pastry into small shapes
 - preparing and using pre-bake finishes and decorations
 - selecting and preparing appropriate cake tins and moulds
 - stirring and aerating to achieve required consistency and texture
 - using required amount of batter and paste according to desired characteristics of finished products
 - weighing or measuring and sifting dry ingredients
 - whisking, folding, piping and spreading
- expected product characteristics of the classical and contemporary petits fours specified in the performance evidence:
 - appearance
 - colour
 - consistency
 - crumb structure
 - moisture content
 - shape
 - size
 - taste
 - texture
- historical and cultural derivations of a variety of petits fours
- appropriate cooking temperatures and times for petits fours and fillings
- indicators of freshness and quality of stocked ingredients for petits fours
- mise en place requirements for producing petits fours and fillings
- common bases used for producing petits fours:
 - choux pastry
 - sponge
 - sweet pastry
- types of caramelised petits fours:

- filled
- fresh or dried fruit
- fresh or dried nuts
- unfilled
- types of marzipan based petits fours:
 - coloured
 - flavoured
 - modelled by hand
 - sealed with cocoa butter or food lacquer
 - shaped with the aid of moulds
- decoration techniques for petits fours:
 - cocoa mass screen techniques
 - cigarette paste decoration techniques
- appropriate environmental conditions for storing petits fours and re-usable by-products of their preparation to:
 - ensure food safety
 - optimise shelf life
- safe operational practices using essential functions and features of equipment used to produce petits fours.

Assessment Conditions

Skills must be demonstrated in an operational pastry kitchen. This can be:

- an industry workplace
- a simulated industry environment, such as a training kitchen servicing customers.

Assessment must ensure access to:

- fixtures and large equipment:
 - commercial grade work benches (1.5 m/person)
 - commercial cake mixer and attachments:
 - dough hook
 - paddle
 - whisk
 - commercial refrigeration and freezer unit with shelving
 - double sinks with hot and cold water
 - gas or electric stove tops
 - industrial strength food processor
 - marble bench or slab
 - ovens with timer and trays:
 - convection

- deck
- microwave
- pastry/dough break
- proofer
- storage facilities:
 - shelving
 - trays
- small equipment:
 - beaters
 - bowl cutters
 - cake moulds
 - cutting boards
 - cutting implements for nuts and fruits
 - fluted and plain flan rings and cutter
 - food handler gloves
 - graters
 - knives:
 - large serrated cake knives
 - measurers:
 - metric calibrated measuring jugs
 - oven mitts
 - saccharometer
 - scales
 - service-ware:
 - platters, dishes, and bowls
 - serving tongs and trowels
 - sets of stainless steel bowls
 - silicon mats
 - small utensils:
 - flour and drum sieves
 - strainers and chinois
 - spatulas
 - whisks:
 - fine stainless steel wire
 - coarse stainless steel wire
 - spatulas
 - spoons:
 - wooden spoons
 - large plain and slotted metal spoons
 - storage containers and trays

- wire cooling racks
- specific equipment for producing petits fours:
 - chocolate thermometer
 - dipping forks
 - icing and decorating equipment:
 - chocolate spray gun
 - crimpers
 - decorative combs
 - fine icing sugar sieves
 - fine paint brushes
 - fine piping tubes
 - matfer-type stencils
 - piping bags and attachments
 - silk screens
 - presentation equipment:
 - cake boards
 - cake boxes
 - cake stands:
 - multi-tier
 - clear cover
 - cake wheels
 - doilies
 - mirrors
 - petit four cutters
 - petit four dipping racks
 - petit four moulds
 - petit four paper cases
 - platters
 - refrigerated cake display cases or towers
 - receptacles made from both edible and non-edible materials:
 - ceramic
 - chocolate
 - croquant
 - crystal
 - glass
 - metallic platters and trays
 - sugar lace
 - tulip paste
- diverse and comprehensive range of commercial ingredients for the petits fours specified in the performance evidence

- cleaning materials and equipment:
 - cleaning cloths
 - commercial cleaning and sanitising agents and chemicals for cleaning commercial kitchens, equipment and food storage areas
 - dustpans and brooms
 - garbage bins and bags
 - hand towel dispenser and hand towels
 - mops and buckets
 - separate hand basin and antiseptic liquid soap dispenser for hand washing
 - sponges, brushes and scourers
 - tea towels
- organisational specifications:
 - equipment manufacturer instructions
 - current commercial stock control procedures and documentation for ordering, monitoring and maintaining stock
 - food preparation lists
 - mise en place lists, menus, standard recipes, and recipes for special dietary requirements
 - ordering and docketing paperwork
 - food safety plans
 - guidelines relating to food disposal, storage and presentation requirements
 - safety data sheets (SDS) for cleaning agents and chemicals
- industry realistic ratios of kitchen staff to customers; these can be:
 - staff and customers in an industry workplace during the assessment process; or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors; and:

- have worked in industry for at least three years where they have applied the skills and knowledge of this unit of competency.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

SITHPAT006 Produce desserts

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to produce hot, cold and frozen desserts following standard and special dietary recipes. It requires the ability to select, prepare and portion ingredients and to use equipment and a range of cookery methods to make and present desserts.

The unit applies to hospitality and catering organisations that produce and serve desserts, including hotels, restaurants, clubs and patisseries.

It applies to patissiers who usually work under the guidance of more senior chefs.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

SITXFSA001 Use hygienic practices for food safety

Competency Field

Patisserie

Unit Sector

Hospitality

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Select ingredients.
 - 1.1. Confirm food production requirements from food preparation list and standard recipes.
 - 1.2. Calculate ingredient amounts according to requirements.
 - 1.3. Identify and select ingredients from stores according to recipe, quality, freshness and stock rotation requirements.
2. Select, prepare and use equipment.
 - 2.1. Select type and size of equipment suitable to requirements.
 - 2.2. Safely assemble and ensure cleanliness of equipment before use.
 - 2.3. Use equipment safely and hygienically according to manufacturer instructions.
3. Portion and prepare ingredients.
 - 3.1. Sort and assemble ingredients according to food production sequencing.
 - 3.2. Weigh and measure wet and dry ingredients according to the recipe and quantity of desserts required.
 - 3.3. Minimise waste to maximise profitability of desserts produced.
4. Produce desserts and sauces.
 - 4.1. Following standard recipes, produce desserts using cookery methods to achieve desired product characteristics.
 - 4.2. Follow special dietary recipes to produce desserts for those with special dietary requirements.
 - 4.3. Produce hot and cold sauces to desired consistency and flavour.
 - 4.4. Use thickening agents suitable for sweet sauces.
 - 4.5. Make **food quality adjustments** within scope of responsibility.
5. Portion, present and store desserts.
 - 5.1. Portion desserts to maximise yield and profitability of food production.
 - 5.2. Use accompaniments that balance and enhance taste and texture of desserts.
 - 5.3. Select garnishes and decorations with flavours and textures that complement desserts.
 - 5.4. Plate desserts, accompaniments and garnishes attractively, with artistic flair appropriate for the occasion and the item.
 - 5.5. Plate and decorate desserts for practicality of service and customer consumption.
 - 5.6. Visually evaluate desserts and **adjust presentation** before serving.
 - 5.7. Display desserts with appropriate sauces and garnishes.
 - 5.8. Store desserts in appropriate **environmental conditions**.
 - 5.9. Clean work area, and dispose of or store surplus and re-usable by-products according to organisational procedures, environmental considerations, and cost-reduction initiatives.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	- locate information in food preparation lists and standard recipes to determine preparation requirements - locate and read date code and stock rotation labels.
Writing skills to:	write notes on recipe requirements and calculations.
Numeracy skills to:	calculate the number of portions.
Planning and organising skills to:	efficiently sequence the stages of food preparation and production.
Self-management skills to:	manage own speed, timing and productivity.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

<i>Food quality adjustments</i> must involve consideration of factors relating to:	- ratio of wet to dry ingredients - taste - temperature - texture.
<i>Adjusting presentation</i> must involve consideration of:	- accompaniments and garnishes to maximise visual appeal: - balance - colour - contrast - plating food for practicality of: - customer consumption - service - wiping drips and spills.
<i>Environmental conditions</i> must ensure appropriate:	- atmosphere - humidity - light

- packaging
- temperature
- use of containers
- ventilation.

Unit Mapping Information

SITHPAT306 Produce desserts

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

Assessment Requirements for SITHPAT006 Produce desserts

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- follow standard and special recipes to produce at least ten different desserts from the common desserts listed in the knowledge evidence
- ensure that at least two of the above desserts are produced to meet requirements of different special dietary requirements as listed in the knowledge evidence
- produce and use each of the following sauces at least once when preparing above range of desserts:
 - chocolate based sauces
 - custards and crèmes
 - flavoured butters and creams
 - fruit purées, sauces or coulis
 - fruit syrups
 - sabayon and zabaglione
 - sugar syrups
- use each of the garnishes and decorations listed in the knowledge evidence at least once when preparing above desserts
- use appropriate cookery methods from the list in the knowledge evidence when producing the above desserts
- present desserts, accompaniments and garnishes attractively and decoratively
- prepare above desserts:
 - that are consistent in quality, size, shape and appearance
 - within commercial time constraints
 - reflecting required quantities to be produced
 - following procedures for portion control and food safety practices when handling and storing desserts
 - responding to special customer requests and dietary requirements.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- culinary terms and trade names for:

- variety of common desserts:
 - bavarois
 - crème brulee
 - crème caramel
 - crêpes
 - custards and creams
 - flans
 - fritters
 - ice-cream
 - meringues
 - mousse
 - parfait
 - pies
 - prepared fruit
 - puddings
 - sabayon
 - sorbet
 - soufflé
 - tarts
- ingredients commonly used to produce desserts
- substitute ingredients used to produce desserts for special dietary recipes:
 - gluten free flour
 - yeast-free flour
 - non-sugar sweeteners
- common special dietary requirements which must be considered when producing desserts:
 - fat free
 - low carbohydrate
 - low fat
 - low gluten
 - gluten free
 - low kilojoule
 - low sugar
 - sugar free
 - type one and two diabetic
 - vegan
- meaning of:
 - food allergy
 - food intolerance
- key health and legal consequences of failing to address special requirements
- contents of stock date codes and rotation labels

- cookery methods used when preparing desserts:
 - adding fats and liquids to dry ingredients
 - baking
 - chilling
 - flambé
 - freezing
 - poaching
 - reducing
 - selecting and preparing appropriate dessert moulds
 - steaming
 - stewing
 - stirring and aerating to achieve required consistency and texture
 - using required amount of batter according to desired characteristics of finished products
 - weighing or measuring and sifting dry ingredients
 - whisking, folding, piping and spreading
- expected product characteristics of the classical and contemporary desserts specified in the performance evidence:
 - appearance
 - colour
 - consistency
 - moisture content
 - shape
 - size
 - structure
 - taste
 - texture
- common garnishes and decorations used when preparing desserts:
 - coloured and flavoured sugar
 - fresh, preserved or crystallised fruits
 - jellies
 - shaved chocolate
 - sprinkled icing sugar
 - whole or crushed nuts
- appropriate cooking temperatures and times for desserts
- techniques to garnish, decorate, plate and present attractive desserts
- indicators of freshness and quality of stocked ingredients for desserts
- mise en place requirements for producing desserts
- appropriate environmental conditions for storing desserts and re-usable by products of their preparation to:

- ensure food safety
- optimise shelf life
- safe operational practices using essential functions and features of equipment used to produce desserts.

Assessment Conditions

Skills must be demonstrated in an operational pastry kitchen. This can be:

- an industry workplace
- a simulated industry environment, such as a training kitchen servicing customers.

Assessment must ensure access to:

- fixtures and large equipment:
 - commercial grade work benches (1.5 m/person)
 - commercial cake mixer and attachments:
 - dough hook
 - paddle
 - whisk
 - commercial refrigeration and freezer unit with shelving
 - double sinks with hot and cold water
 - gas or electric stove tops
 - industrial strength food processor
 - ovens with timer and trays:
 - convection
 - deck
 - microwave
 - pastry/dough break
 - storage facilities:
 - shelving
 - trays
- small equipment:
 - acetate plastic sheets
 - beaters
 - blenders
 - bowl cutters
 - commercial mixers and attachments
 - cutting boards
 - cutting implements for nuts and fruits
 - decorating equipment:
 - blow torch

- chocolate spray gun
- fine icing sugar sieves
- fine piping tubes
- icing and cocoa powder dusters
- matfer-type stencils
- silk screens
- templates
- deep-fryer
- dessert service-ware:
 - dessert plates
 - dishes
 - glasses
 - bowl
 - coupes
 - cutlery
 - doilies
- fine and heavy gauge whisks and strainers
- fine icing sugar sieves
- fluted and plain flan rings
- graters
- gratin dishes
- ice makers
- ice cream machines
- juicers
- knives:
 - large serrated cake knives
- ladles in a variety of sizes
- measurers:
 - metric calibrated measuring jugs
- mixers
- moulds and dishes:
 - tartlet
 - darioles
- oven mitts
- pans:
 - crêpe
 - omelette
- presentation equipment:
 - cake boards
 - cake boxes

- cake stands
- doilies
- piping bags and attachments
- portion control markers
- ramekins
- range of saucepans and pots for small and large production
- salamander
- scales
- scoops
- serving tongs and trowels
- sets of stainless steel bowls
- skewers:
 - metal
 - bamboo
- soufflé cups
- spatulas
- spoons:
 - wooden spoons
 - large plain and slotted metal spoons
- steamer
- storage containers and trays
- sweets trolley or dessert buffet table
- vitamisers
- wire cooling racks
- diverse and comprehensive range of commercial ingredients for the desserts specified in the performance evidence
- cleaning materials and equipment:
 - cleaning cloths
 - commercial cleaning and sanitising agents and chemicals for cleaning commercial kitchens, equipment and food storage areas
 - dustpans and brooms
 - garbage bins and bags
 - hand towel dispenser and hand towels
 - mops and buckets
 - separate hand basin and antiseptic liquid soap dispenser for hand washing
 - sponges, brushes and scourers
 - tea towels
- organisational specifications:
 - equipment manufacturer instructions

- current commercial stock control procedures and documentation for ordering, monitoring and maintaining stock
- food preparation lists
- mise en place lists, menus, standard recipes, and recipes for special dietary requirements
- ordering and docketing paperwork
- food safety plans
- guidelines relating to food disposal, storage and presentation requirements
- safety data sheets (SDS) for cleaning agents and chemicals
- industry realistic ratios of kitchen staff to customers; these can be:
 - staff and customers in an industry workplace during the assessment process; or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors; and:

- have worked in industry for at least three years where they have applied the skills and knowledge of this unit of competency.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

SITHPAT008 Produce chocolate confectionery

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to temper couverture (pure coating chocolate) to produce individual chocolates. It requires the ability to select, prepare and portion ingredients and to use equipment and a range of cookery methods to mould and fill individual chocolates with hard or soft fillings and centres.

The unit applies to hospitality and catering organisations which produce, display and serve specialist patisserie products, including hotels, restaurants, patisseries and chocolatiers.

The preparation and moulding of individual chocolates is a high order technical skill used by experienced patissiers who operate independently or with limited guidance from others.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

SITXFSA001 Use hygienic practices for food safety

Competency Field

Patisserie

Unit Sector

Hospitality

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the Performance criteria describe the performance needed to demonstrate

essential outcomes. achievement of the element.

1. Select ingredients.
 - 1.1. Confirm food production requirements from food preparation list and standard recipes.
 - 1.2. Calculate ingredient amounts according to requirements.
 - 1.3. Identify and select ingredients from stores according to recipe, quality, freshness and stock rotation requirements.
2. Select, prepare and use equipment.
 - 2.1. Select type and size of equipment suitable to requirements.
 - 2.2. Safely assemble and ensure cleanliness of equipment before use.
 - 2.3. Use equipment safely and hygienically according to manufacturer instructions.
 - 2.4. **Protect** polished chocolate moulds from contamination.
 - 2.5. Keep chocolate moulds at an appropriate and constant temperature.
3. Portion and prepare ingredients.
 - 3.1. Sort and assemble ingredients for chocolate confectionery according to food production sequencing.
 - 3.2. Weigh and measure wet and dry ingredients according to the recipe and quantity of chocolates required.
 - 3.3. Minimise waste to maximise profitability of chocolates produced.
4. Temper couverture.
 - 4.1. Use tempering methods and appropriate temperatures to melt and temper couverture.
 - 4.2. Manipulate couverture to the correct viscosity and desired flow properties to achieve desired colour, gloss, sheen and snap upon solidification.
 - 4.3. Control the temperature to retain workable consistency.
5. Prepare centres and fillings.
 - 5.1. Use cookery methods for centres and fillings to achieve full flavoured, interesting and natural characteristics.
 - 5.2. Manipulate ingredients at correct temperature to achieve the correct viscosity and consistency.
 - 5.3. Follow standard recipes and make **food quality adjustments** within scope of responsibility.
 - 5.4. Prepare centres of precisely uniform shapes and sizes.
6. Make moulded chocolates.
 - 6.1. Select tempered couverture to match fillings.
 - 6.2. Set tempered couverture in moulds to achieve even and appropriate thickness free from marks or air bubbles.
 - 6.3. Insert fillings to a level surface and allow space for seal.
 - 6.4. Seal with a layer of chocolate of appropriate thickness.
 - 6.5. Cool, de mould chocolates and handle carefully to retain a glossy surface.
7. Coat chocolate centres.
 - 7.1. Select tempered couverture to match centres.
 - 7.2. Bring centres to be coated to the correct temperature.
 - 7.3. Use appropriate methods to coat centres to achieve an even and

appropriate thickness with a uniform quality finish.

8. Decorate, present and store chocolates.
- 8.1. Decorate chocolates attractively, according to standard recipes, using designs suited to the product.
 - 8.2. Use suitable service-ware to attractively present chocolates according to organisational standards.
 - 8.3. Display chocolates in appropriate conditions to retain optimum freshness.
 - 8.4. Store chocolates in appropriate **environmental conditions**.
 - 8.5. Clean work area, and dispose of or store surplus and re-usable by-products according to organisational procedures, environmental considerations, and cost-reduction initiatives.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	- locate information in food preparation lists and standard recipes to determine preparation requirements - locate and read date code and stock rotation labels.
Writing skills to:	record clear sequenced instructions for new recipes, specifying ingredient quantities.
Numeracy skills to:	determine tempering times and temperatures.
Problem-solving skills to:	- evaluate quality of ingredients and finished chocolates and make adjustments to ensure a quality product - adjust taste, texture and appearance of food products according to identified deficiencies.
Planning and organising skills to:	efficiently sequence the stages of food preparation and production.
Self-management skills to:	manage own speed, timing and productivity.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Protecting mould from contamination must involve:

- ensuring that the polished surface is:
 - clean, polished and free of dust or residue
 - untouched by bare fingers
- untouched by objects that may dull, scratch or damage it.

Food quality adjustments must involve consideration of factors relating to:

- ratio of wet to dry ingredients
- taste
- temperature
- texture.

Environmental conditions must ensure appropriate:

- atmosphere
- humidity
- light
- packaging
- temperature
- use of containers
- ventilation.

Unit Mapping Information

SITHPAT402 Produce chocolate confectionery

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

Assessment Requirements for SITHPAT008 Produce chocolate confectionery

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- prepare individual chocolates from three different types listed in the knowledge evidence with each of the following:
 - hard centres
 - soft centres
 - fillings
- use at least six different centres or fillings listed in the knowledge evidence when producing above chocolates
- use at least one of the tempering methods for couverture when producing above chocolates
- produce above individual chocolates in commercial quantities:
 - that are consistent in quality, size, shape and appearance
 - within commercial time constraints
 - following procedures for portion control and food safety practices when handling and storing chocolate ingredients and chocolates
 - responding to special customer requests and dietary requirements.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- culinary terms and trade names for:
 - ingredients commonly used to produce chocolate confectionery
 - classical and contemporary individual chocolates specified above in the performance evidence
- contents of stock date codes and rotation labels
- types of chocolates:
 - cut or dressed
 - hand coated
 - machine enrobed
 - made with prepared hollow shells

- moulded
- classical and contemporary centres and fillings used when producing chocolates:
 - caramel
 - croquant
 - flavoured fondant
 - ganache
 - jellies
 - liqueurs
 - marzipan
 - nougat
 - nuts and fruits
- historical and cultural derivations of a variety of chocolates
- indicators of freshness and quality of stocked ingredients for chocolates
- mise en place requirements for producing chocolate confectionery
- tempering methods for couverture:
 - controlling the formation of seed crystals
 - tabling method
 - use of heated water jackets
 - use of microwave
 - vaccination or addition method
- appropriate temperatures to melt and temper couverture
- properties of tempered couverture:
 - flow properties
 - setting properties
 - viscosity
- expected product characteristics of solidified couverture specified in the performance evidence:
 - colour
 - gloss
 - sheen
 - snap
- methods to coat centres:
 - hand coating
 - hand dipping
 - machine enrobed
- complementary tastes and textures of dark, milk and white couverture for fillings and centres
- decoration techniques for individual chocolates
- appropriate environmental conditions for storing ingredients and individual chocolates to:
 - ensure food safety

- optimise shelf life
- safe operational practices using essential functions and features of equipment used to:
 - produce chocolate confectionery
 - protect polished chocolate moulds from contamination and damage.

Assessment Conditions

Skills must be demonstrated in an operational pastry kitchen. This can be:

- an industry workplace
- a simulated industry environment, such as a training kitchen servicing customers.

Assessment must ensure access to:

- fixtures and large equipment:
 - commercial grade work benches (1.5 m/person)
 - commercial refrigeration and freezer unit with shelving
 - double sinks with hot and cold water
 - gas or electric stove tops
 - industrial strength food processor
 - marble bench or slab
 - microwave
 - proofer
 - storage facilities:
 - shelving
 - trays
 - warming area
- small equipment:
 - acetate plastic sheets, baking sheets/paper, parchment paper and silicon paper
 - beaters
 - brushes
 - bowl cutters
 - cutting implements for nuts and fruits
 - cutting boards
 - food handler gloves
 - graters
 - knives:
 - large serrated cake knives
 - measurers:
 - metric calibrated measuring jugs
 - mixers

- pastry brushes
- pastry cutters and shapes
- piping bags and attachments
- range of presentation equipment:
 - doilies
 - mirrors
 - platters
- range of service-ware
- range of saucepans and pots for small and large production
- saccharometer
- scales (1 gram increments)
- sets of stainless steel bowls
- spoons:
 - wooden spoons
 - large plain and slotted metal spoons
- storage containers and trays
- whisks:
 - fine stainless steel wire
 - coarse stainless steel wire
- diverse and comprehensive range of commercial ingredients for the chocolate confectionery specified in the performance evidence
- cleaning materials and equipment:
 - cleaning cloths
 - commercial cleaning and sanitising agents and chemicals for cleaning commercial kitchens, equipment and food storage areas
 - dustpans and brooms
 - garbage bins and bags
 - hand towel dispenser and hand towels
 - mops and buckets
 - separate hand basin and antiseptic liquid soap dispenser for hand washing
 - sponges, brushes and scourers
 - tea towels
- organisational specifications:
 - equipment manufacturer instructions
 - current commercial stock control procedures and documentation for ordering, monitoring and maintaining stock
 - food preparation lists
 - mise en place lists, standard recipes, and recipes for special dietary requirements
 - ordering and docketing paperwork
 - food safety plans

- guidelines relating to food disposal, storage and presentation requirements
- safety data sheets (SDS) for cleaning agents and chemicals
- industry realistic ratios of kitchen staff to customers; these can be:
 - staff and customers in an industry workplace during the assessment process; or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors; and:

- have worked in industry for at least three years where they have applied the skills and knowledge of this unit of competency.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

SITXCCS003 Interact with customers

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to deliver fundamental customer service to both internal and external customers. It requires the ability to greet and serve customers, and respond to a range of basic customer service enquiries, including routine customer problems.

The unit applies to frontline service personnel who operate under close supervision and with guidance from others. They provide routine customer service and would not be expected to respond to complex customer requests or complaints.

The unit applies to individuals working in a range of tourism, travel, hospitality and events contexts.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Client and Customer Service

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Greet and serve customers.	1.1. Prioritise customers ahead of other workplace duties. 1.2. Greet customers according to organisational customer service standards. 1.3. Communicate with customers in a clear and professional manner. 1.4. Explain and match products and services to customer needs.
2. Work with others to deliver service.	2.1. Identify personal limitations in serving the needs of customers and seek assistance from others where appropriate. 2.2. Follow directions of supervisors and managers to deliver quality service. 2.3. Resolve routine customer problems according to own level of responsibility and organisational policy. 2.4. Escalate other service issues to a higher level staff member for action in line with organisational procedures.
3. Provide feedback on customer service.	3.1. Report service issues and customer problems as they arise. 3.2. Provide customer feedback to relevant supervisors or managers.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	• interpret sometimes detailed procedures documents.
Writing skills to:	• record simple notes and basic information.
Oral communication skills to:	• ask questions and actively listen to customers to determine their needs • discuss causes of customer problems with colleagues and supervisors in a professional manner.
Problem-solving skills to:	• recognise customer problems and resolve or refer service issues.
Initiative and enterprise skills to:	• recognise delays and deficiencies in customer service and rectify to customer satisfaction in line with own level of responsibility.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Range is restricted to essential operating conditions and any other variables essential to the work environment.

- Ways to ***communicate with customers*** must include:
- communicating:
 - by telephone
 - electronically
 - face-to-face
 - showing interest in customer needs and maintaining a welcoming customer environment during service delivery through the use of:
 - appropriate voice tonality and volume
 - basic gestures
 - product information sheets.
- Others*** must include:
- colleagues
 - managers
 - supervisors.

Unit Mapping Information

SITXCCS202 Interact with customers

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

Assessment Requirements for SITXCCS003 Interact with customers

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- identify customer requirements and provide effective customer service to two different internal and two different external customers to meet requirements
- interact with above customers in line with organisational customer service standards and within designated organisational response times
- demonstrate procedures to respond to three different customer problems according to organisational policies and procedures
- identify situations where problems are beyond own level of responsibility, and process to escalate in line with organisational policies and procedures
- seek informal feedback from customers on above activities.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- importance of the customer in the service industries
- customer service standards expected in the service industries
- profiles of different types of customers:
 - external
 - internal
 - new
 - regular or repeat
 - visitors
- value and role of customer feedback in improving service delivery
- presentation standards for:
 - customer environment
 - customer service personnel
 - documents and promotional materials
- customer service policies and procedures:
 - application of booking or cancellation fees
 - response times for acknowledging and greeting customers

- response times for delivering products and services
- customer service policies for resolving routine customer problems
- policies regarding product pricing and quality
- processing refunds and exchanges
- empowerment of different levels of personnel to resolve complaints, disputes, service issues and customer compensation
- policies for escalating and reporting service issues and customer problems
- procedures for responding to routine customer problems:
 - incorrect pricing of products and services
 - delays or errors in providing products or services
 - misunderstanding customer requests.

Assessment Conditions

Skills must be demonstrated in an operational business environment where customers are served. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- organisational policies and procedures relating to:
 - customer service standards
 - designated response times
 - presentation standards
 - dealing with customer problems
 - recording and reporting customer feedback
- internal and external customers with whom the individual can interact; these can be:
 - customers in an industry workplace during the assessment process; or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

SITXFSA001 Use hygienic practices for food safety

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to use personal hygiene practices to prevent contamination of food that might cause food-borne illnesses. It requires the ability to follow predetermined organisational procedures and to identify and control food hazards.

The unit applies to all organisations with permanent or temporary kitchen premises or smaller food preparation or bar areas.

This includes restaurants, cafes, clubs, hotels, and bars; tour operators; attractions; function, event, exhibition and conference catering; educational institutions; aged care facilities; correctional centres; hospitals; defence forces; cafeterias, kiosks, canteens and fast food outlets; residential catering; in-flight and other transport catering.

It applies to food handlers who directly handle food or food contact surfaces such as cutlery, plates and bowls during the course of their daily work activities. This includes cooks, chefs, caterers, kitchen stewards, kitchen hands, bar, and food and beverage attendants, and sometimes room attendants and front office staff.

Food handlers must comply with the requirements contained within the Australia New Zealand Food Standards Code.

In some States and Territories businesses are required to designate a food safety supervisor who is required to be certified as competent in this unit through a registered training organisation.

Food safety legislative and knowledge requirements may differ across borders. Those developing training to support this unit must consult the relevant state or territory food safety authority to determine any accreditation arrangements for courses, trainers and assessors.

Pre-requisite Unit

Nil

Competency Field

Food Safety

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1. Follow hygiene procedures and identify food hazards.
2. Report any personal health issues.
3. Prevent food contamination.
4. Prevent cross-contamination by washing hands.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1.Follow organisational hygiene procedures.
- 1.2.Report unsafe practices that breach hygiene procedures promptly.
- 1.3.Identify food hazards that may affect the health and safety of customers, colleagues and self.
- 1.4.Remove or minimise the hygiene hazard and report as appropriate for follow-up.
- 2.1.Report personal health issues likely to cause a hygiene risk.
- 2.2.Report incidents of food contamination resulting from personal health issues.
- 2.3.Cease participation in food handling activities where own health issue may cause food contamination.
- 3.1.Maintain clean clothes, wear required personal protective clothing, and only use organisation-approved bandages and dressings.
- 3.2.Prevent food contamination from clothing and other items worn.
- 3.3.Prevent unnecessary direct contact with ready to eat food.
- 3.4.Ensure hygienic personal contact with food and food contact surfaces.
- 3.5.Use hygienic cleaning practices that prevent food-borne illnesses.
- 4.1.Wash hands at appropriate times and follow hand washing procedures consistently.
- 4.2.Wash hands using appropriate facilities.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	• interpret organisational documents or diagrams relating to: • organisational food safety programs • hygiene and food safety procedures • hazard analysis and critical control points (HACCP) practices.
Oral communication skills to:	• report hygiene hazards and non-compliant organisational practices accurately.

Unit Mapping Information

SITXFSA101 Use hygienic practices for food safety

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

Assessment Requirements for SITXFSA001 Use hygienic practices for food safety

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- demonstrate use of safe food handling practices in food handling work functions in line with organisational hygiene procedures on at least three occasions
- demonstrate procedures to:
 - identify food hazards
 - report unsafe practices
 - report incidents of food contamination.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- basic aspects of commonwealth, state or territory food safety laws, standards and codes as follows:
 - meaning of contaminant, contamination and potentially hazardous foods as defined by the Australia New Zealand Food Standards Code
 - employee and employer responsibility to participate in hygienic practices
 - reasons for food safety programs and what they must contain
 - role of local government regulators
 - ramifications of failure to observe food safety law and organisational policies and procedures
- health issues likely to cause a hygiene risk relevant to food safety:
 - airborne diseases
 - food-borne diseases
 - infectious diseases
- hygiene actions that must be adhered to in order to avoid food-borne illnesses
- hand washing practices:
 - before commencing or recommencing work with food
 - immediately after:
 - handling raw food
 - smoking, coughing, sneezing or blowing the nose

- eating or drinking
- touching the hair, scalp or any wound
- using the toilet
- basic aspects of hazard analysis and critical control points (HACCP) method of controlling food safety
- specific industry sector and organisation:
 - major causes of food contamination and food-borne illnesses
 - sources and effects of microbiological contamination of food
 - workplace hygiene hazards when handling food and food contact surfaces
 - basic content of organisational food safety programs
 - contents of organisational hygiene and food safety procedures
 - hygienic work practices for individual job roles and responsibilities.

Assessment Conditions

Skills must be demonstrated in an operational food preparation area. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- fixtures:
 - work benches
 - refrigeration unit
 - sink
 - storage facilities
- small equipment:
 - assorted pots and pans
 - containers for hot and cold storage
 - crockery
 - cutlery
 - cutting boards
 - food handler gloves
 - glassware
 - knives
 - packaging materials
 - receptacles for presentation and display purposes
 - small utensils:
 - tongs
 - serving utensils
- appropriate facilities for handwashing:

- designated hand washing sink
- antiseptic liquid soap
- single use towels
- warm running water
- food ingredients and ready to eat food items
- current plain English regulatory documents distributed by the commonwealth, state, territory or local government food safety authority
- Australia New Zealand Food Standards Code
- current commercial food safety programs, policies and procedures used for managing food safety.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

SITXHRM001 Coach others in job skills

Modification History

Not applicable.

Application

This unit describes the performance outcomes, skills and knowledge required to provide on-the-job coaching to colleagues. It requires the ability to explain and demonstrate specific skills, knowledge and procedures and monitor the progress of colleagues until they are able to operate independently of the coach.

The unit applies to experienced operational personnel and to supervisors and managers who informally train other people in new workplace skills and procedures.

It applies to all tourism, hospitality and event sectors.

No occupational licensing, certification or specific legislative requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Human Resource Management

Unit Sector

Cross-Sector

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1. Prepare for on-the-job coaching.
 - 1.1. Identify need for coaching based on a range of factors.
 - 1.2. Identify specific coaching needs through discussion with colleague and organise coaching sessions.
2. Coach colleagues on-the-job.
 - 2.1. Explain overall purpose of coaching to colleague.
 - 2.2. Explain and demonstrate specific skills.
 - 2.3. Communicate required knowledge and check colleague understanding.
 - 2.4. Advise organisational procedures for completing workplace tasks.
 - 2.5. Provide colleague with opportunity to practise skill and ask questions.
 - 2.6. Provide feedback in constructive and supportive manner.
3. Follow-up coaching.
 - 3.1. Monitor progress of new workplace skills and provide supportive assistance.
 - 3.2. Report progress to the appropriate person.
 - 3.3. Identify performance problems or difficulties with coaching and rectify or refer to appropriate person for follow-up.

Foundation Skills

Foundation skills essential to performance in this unit, but not explicit in the performance criteria are listed here, along with a brief context statement.

SKILLS	DESCRIPTION
Reading skills to:	• review workplace documentation completed by colleague.
Oral communication skills to:	• use active listening and open questioning techniques to confirm understanding.
Numeracy skills to:	• calculate adequate time required for coaching and for the colleague to complete required tasks.
Planning and organising skills to:	• complete own work tasks within designated timeframes and simultaneously coach others in their job skills.

Unit Mapping Information

SITXHRM301 Coach others in job skills

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

Assessment Requirements for SITXHRM001 Coach others in job skills

Modification History

Not applicable.

Performance Evidence

Evidence of the ability to complete tasks outlined in elements and performance criteria of this unit in the context of the job role, and:

- provide effective on-the job coaching to four different colleagues
- address identified performance problems or difficulties experienced by colleagues in each of the above coaching sessions and rectify or refer as appropriate
- evaluate colleagues' performance and provide constructive feedback as part of above coaching sessions
- demonstrate the following during each of the above coaching activities:
 - clear communication and demonstration of the organisational tasks required of the colleague
 - completion of training within commercial time constraints
 - application of the key principles of training.

Knowledge Evidence

Demonstrated knowledge required to complete the tasks outlined in elements and performance criteria of this unit:

- communication techniques suitable to a workplace training context
- objectives and scope of the coaching
- factors which impact need for coaching:
 - direction from colleagues
 - own observation and workplace experience
 - request for coaching from colleagues to be coached
- key principles of training:
 - explanation
 - demonstration
 - review
 - listening to trainee explanation
 - observing and evaluating trainee demonstration
 - providing feedback
- legislative work health and safety and hygiene requirements
- possible causes of performance problems or difficulties:

- breakdown in communication
- inappropriate circumstances for coaching
- insufficient opportunity to practice
- language or cultural barriers
- shyness or lack of confidence.

Assessment Conditions

Skills must be demonstrated in an operational environment with colleagues requiring coaching. This can be:

- an industry workplace
- a simulated industry environment.

Assessment must ensure access to:

- work tasks in which to coach others
- colleagues in need of training; these can be:
 - colleagues in an industry workplace who are assisted by the individual during the assessment process; or
 - individuals who participate in role plays or simulated activities, set up for the purpose of assessment, in a simulated industry environment operated within a training organisation.

Assessors must satisfy the Standards for Registered Training Organisations' requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=68c40a93-e51d-4e0f-bc06-899dff092694>

TAEASS401 Plan assessment activities and processes

Modification History

Release	Comments
Release 2	This was first released with <i>TAE Training and Education Training Package Release 2.1</i> . Minor update to Assessment Conditions.
Release 1	This version first released with <i>TAE Training and Education Training Package Release 2.0</i> .

Application

This unit describes the skills and knowledge required to plan the assessment process, including recognition of prior learning (RPL), in a competency-based assessment system.

It applies to individuals with assessment planning responsibilities.

In planning activities and processes, individuals are required to identify the components of assessment tools, analyse and interpret assessment tools, and develop assessment instruments (also known as assessment tasks) and assessment plans.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Assessment

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine the assessment approach	1.1 Identify the candidate and confirm the purposes and context of the assessment with relevant people according to legal,

ELEMENT	PERFORMANCE CRITERIA
	organisational and ethical requirements 1.2 Identify and access applicable industry or workplace standards for the assessment, and any specific assessment requirements
2. Prepare the assessment plan	2.1 Analyse units of competency and assessment requirements to identify evidence needed to demonstrate competence, according to the rules of evidence 2.2 Select assessment methods and instruments to support the collection of defined evidence, taking into account the context in which the assessment will take place 2.3 Develop the assessment plan and gain approval from relevant stakeholders
3. Identify modification and contextualisation requirements	3.1 Use information from the candidate and, where relevant, the candidate's workplace to identify contextualisation needs 3.2 Check advice provided by the training package or course developer relevant to identified contextualisation needs 3.3 Analyse existing assessment tools and record amendments required to address identified contextualisation needs 3.4 Determine opportunities for integrated assessment activities and record any changes required to assessment tools
4. Develop the assessment instruments	4.1 Analyse available assessment instruments for their suitability for use, and identify any required modifications 4.2 Develop assessment instruments to meet the required standard and specific workplace/candidate needs 4.3 Map assessment instruments against the unit or course requirements 4.4 Write clear instructions for the candidate and assessor regarding the use of assessment instruments 4.5 Check and confirm that draft assessment instruments meet required standards and specific workplace/candidate needs and record outcomes of checks

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

FOUNDATION SKILLS

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 3.1, 3.2, 3.3, 3.4, 4.2, 4.3	- Identifies and confirms legal, organisational and ethical requirements - Selects and analyses assessment-related documents
Writing	1.1, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5	- Documents the assessment plan - Develops assessment instruments, including instructions and mapping - Records outcomes of draft assessment checks
Oral Communication	1.1, 2.3, 3.1	Participates in exchanges about assessment processes and the trialling of instruments appropriate to the audience
Navigate the world of work	1.1	Identifies, confirms and takes responsibility for adherence to policies, procedures, legal, and ethical requirements
Interact with others	1.1, 2.3, 3.1	Collaborates with others as part of routine activities, and to confirm understanding
Get the work done	1.1, 1.2, 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 4.2, 4.3, 4.5	- Plans a range of routine processes and related tasks with logically sequenced steps, according to defined standards or parameters - Uses formal decision-making processes, identifying information and evaluating several choices against a limited set of criteria - Evaluates effectiveness of planning and design decisions in terms of how well they meet requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
TAEASS401 Plan assessment activities and processes	TAEASS401B Plan assessment activities and processes	Updated to meet Standards for Training Packages. Addition of new element.	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

Assessment Requirements for TAEASS401 Plan assessment activities and processes

Modification History

Release	Comments
Release 2	This was first released with <i>TAE Training and Education Training Package Release 2.1</i> . Minor update to Assessment Conditions.
Release 1	This version first released with <i>TAE Training and Education Training Package Release 2.0</i> .

Performance Evidence

The candidate must demonstrate the ability to complete tasks outlined in the elements and performance criteria of this unit, including:

- planning and organising the assessment process on a minimum of five separate occasions
- planning and organising two Recognition of Prior Learning (RPL) assessments (which may be two of the five assessment processes above.)

The evidence requirements for each occasion must include:

- a documented assessment plan
- a different endorsed or accredited unit of competency (or clusters of units of competency) for each of the five occasions
- contextualisation of the unit(s) of competency and the selected assessment tools, where required
- incorporation of reasonable adjustment strategies
- development of suitable assessment instruments for each of the five occasions

following organisational arrangements.

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge to effectively complete the task outlined in the elements and performance criteria of this unit. This includes knowledge of:

- obligations of an assessor under applicable legislation and/or standards

- the major features of a unit of competency, and how they are to be addressed in assessment activities and processes
- interpreting competency standards as the minimum standard for assessment
- guidelines for contextualising units of competency
- different purposes of assessment and different assessment contexts, including RPL
- the purpose and features of evidence, and different types of evidence, used in competency-based assessments, including RPL
- the principles of assessment, and how they guide the assessment process
- the rules of evidence and how they guide the assessment process
- different assessment methods, including their suitability for collecting various types of evidence
- the components of assessment tools

different types of assessment instruments and their purpose and relevance for specific evidence-gathering opportunities.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and which are typical of those experienced in the training and assessment environment. This includes access to the units of competency used in assessment planning activities.

Assessors must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

TAEASS402 Assess competence

Modification History

Release	Comments
Release 2	This was first released with <i>TAE Training and Education Training Package Release 2.1</i> . Minor update to Assessment Conditions.
Release 1	This version first released with <i>TAE Training and Education Training Package Release 2.0</i> .

Application

This unit describes the skills and knowledge required to implement an assessment plan, and gather quality evidence to assess the competence of a candidate using compliant assessment tools.

It applies to teachers, trainers and assessors in enterprises and registered training organisations (RTOs) and those providing assessment advisory services.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Assessment

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for the assessment	1.1 Interpret assessment planning documentation and applicable organisational, legal and ethical requirements for conducting the assessment and confirm with the relevant people 1.2 Access and interpret units of competency that are to be used as

ELEMENT	PERFORMANCE CRITERIA
	benchmarks for assessment, and the nominated assessment tools, to confirm the requirements for the evidence to be collected 1.3 Determine opportunities for integrated assessment activities and document any changes to the assessment instruments, where required 1.4 Determine opportunities for evidence-gathering in actual or simulated activities, through consultation with the candidate and relevant personnel 1.5 Conduct a candidate briefing and explain, discuss and agree on the details of the planned assessment 1.6 Arrange identified material and physical resource requirements 1.7 Identify any specialist support requirements for the assessment, and organise if necessary
2. Gather quality evidence	2.1 Use agreed assessment methods and tools to gather, organise and document evidence in a format suitable for determining competence 2.2 Apply the principles of assessment and rules of evidence in gathering quality evidence
3. Support the candidate	3.1 Discuss and guide candidates in gathering their own evidence to support the recognition of prior learning (RPL) 3.2 Use appropriate communication and interpersonal skills to develop a professional relationship with the candidate that reflects sensitivity to individual differences and enables two-way feedback 3.3 Make decisions on reasonable adjustments with the candidate, based on the candidate's needs and characteristics 3.4 Access specialist support, if required, in accordance with the assessment plan 3.5 Address any workplace health and safety (WHS) risk to a person or equipment immediately
4. Make the assessment decision	4.1 Assess the collected evidence, and to evaluate whether it reflects the evidence required to demonstrate competence 4.2 Use judgement to infer whether competence has been demonstrated, based on the available evidence 4.3 Make the assessment decision in line with agreed assessment procedures and according to the agreed assessment plan 4.4 Provide clear and constructive feedback to the candidate regarding the assessment decision, and clearly document

ELEMENT	PERFORMANCE CRITERIA
	follow-up, if required
5. Record and report the assessment decision	5.1 Record assessment outcomes promptly and accurately 5.2 Complete and submit required assessment documentation, according to assessment procedures and confidentiality conventions 5.3 Inform other relevant parties of the assessment decision, according to confidentiality conventions
6. Review the assessment process	6.1 Review the assessment process in consultation with candidates and other relevant people to improve future practice 6.2 Document and record the review according to relevant assessment system policies and procedures

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 2.1, 4.1	- Accesses and interprets procedural and compliance documentation relevant to the assessment process - Examines and evaluates assessment evidence
Writing	1.1, 1.3, 1.5, 2.1, 3.1, 5.1, 5.2, 5.3, 6.2	Completes workplace documentation accurately using appropriate language and following organisational requirements
Oral Communication	1.1, 1.4, 1.5, 3.1, 3.4, 4.4, 5.3, 6.1	- Communicates information and assessment process requirements clearly, using techniques appropriate to the audience and environment - Interacts appropriately with candidates to build rapport and understanding, and obtain specific information to support the assessment process
Navigate the world of work	1.1, 3.5, 5.3	- Identifies, confirms and takes responsibility for adherence to legal and ethical requirements - Recognises, and follows, explicit and implicit protocols and meets expectations associated with own role

Interact with others	1.1, 1.4, 1.5, 3.1, 3.2, 3.4, 5.3, 6.1	- Adjusts personal communication style in recognition of the values and experiences of others to build rapport - Cooperates and collaborates with others and contributes to activities requiring joint responsibility and accountability
Get the work done	1.1, 1.2, 1.3, 1.4, 1.6, 1.7, 2.1, 2.2, 3.3, 3.4, 4.1, 4.2, 4.3, 6.1, 6.2	- Uses systematic, analytical processes in complex, non-routine situations, gathering information, and identifying and evaluating options against agreed criteria - Organises work according to specific requirements taking some responsibility for decisions regarding the format of information - With guidance, reviews the effectiveness of solutions in relation to the set goals

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
TAEASS402 Assess competence	TAEASS402B Assess competence	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

Assessment Requirements for TAEASS402 Assess competence

Modification History

Release	Comments
Release 2	This was first released with <i>TAE Training and Education Training Package Release 2.1</i> . Minor update to Assessment Conditions.
Release 1	This version first released with <i>TAE Training and Education Training Package Release 2.0</i> .

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in the elements and performance criteria of this unit, including:

- assessment of at least five candidates within the vocational education and training (VET) context against at least one endorsed or accredited unit of competency according to the organisation's assessment processes and practices.
- using recognition of prior learning (RPL) processes in the assessment of at least one candidate (which may be one of the five candidates above)
- making reasonable adjustments in the assessment of at least one candidate.

The assessments must be undertaken under the supervision of a qualified assessor and cover an entire unit of competency for each candidate, including:

- the application of different assessment methods and instruments involving a range of activities and events
- using two-way communication and feedback with the candidate
- exercising judgement in making the assessment decision
- recording and reporting assessment outcomes in accordance with the assessment system and organisational, legal and ethical requirements

reviewing the assessment process.

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge to effectively complete the task outlined in the elements and performance criteria of this unit. This includes knowledge of:

- competency-based assessment, including:
 - VET as a competency-based system
 - how competency based assessment differs from other types of assessment
 - competency standards as the basis of qualifications
 - structure and application of competency standards
 - the principles of assessment and how they are applied
 - the distinction between assessment tools and assessment instruments
 - the rules of evidence and how they are applied
 - the range of assessment purposes and assessment contexts, including RPL
 - different assessment methods, including suitability for gathering various types of evidence, suitability for the content of units, and resource requirements and associated costs
 - reasonable adjustments and when they are applicable
 - types and forms of evidence, including assessment instruments that are relevant to gathering different types of evidence used in competency-based assessment, including RPL
 - the training and assessment strategies, including policies and procedures established by the industry, organisation or training authority
- RPL policies and procedures established by the organisation
- cultural sensitivity and equity considerations in assessment activities
- current legislative requirements relevant to the assessor and the assessment process
- workplace health and safety (WHS) responsibilities associated with assessing competence, including:
 - requirements for reporting hazards and incidents
 - emergency procedures
 - procedures for the use of relevant personal protective equipment
 - the safe use and maintenance of relevant equipment
 - sources of WHS information.

Assessment Conditions

Gather evidence to demonstrate consistent performance in a real assessment environment. The assessment environment must include access to assessment tools and recording materials.

Assessors must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

TAEASS403 Participate in assessment validation

Modification History

Release	Comments
Release 2	This was first released with <i>TAE Training and Education Training Package Release 2.1</i> . Minor updates to Assessment Conditions.
Release 1	This version first released with <i>TAE Training and Education Training Package Release 2.0</i>

Application

This unit describes the skills and knowledge required to participate in an assessment validation process.

It applies to assessors and workplace supervisors with assessment validation responsibilities participating in, but not necessarily leading, the process.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Assessment

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for validation	1.1 Discuss and confirm the purpose, context and scope of the validation process within relevant assessment system policies and procedures 1.2 Arrange materials for validation activities

ELEMENT	PERFORMANCE CRITERIA
	1.3 Check all documents used in the validation process for accuracy and version control 1.4 Analyse relevant units of competency and agree on the evidence needed to demonstrate competence
2. Participate in the validation of assessment tools	2.1 Demonstrate active and appropriate participation in validation sessions and activities using agreed communication methods and modes 2.2 Apply principles of assessment and rules of evidence during validation sessions and activities 2.3 Check that context and conditions of assessment include clear instructions for assessor and candidate and relate directly to the assessment conditions of the relevant unit 2.4 Check that tasks to be administered to the candidate include clear and concise instructions and an outline of evidence requirements 2.5 Check that assessment decision-making rules and benchmarks, are clear and enable consistent outcomes 2.6 Check that recording mechanisms are clear and allow for sufficient information to be recorded 2.7 Review and use assessment maps to assist in determining validity of assessment instruments
3. Contribute to validation outcomes	3.1 Discuss validation findings to support improvements in the quality of assessment in a collective environment 3.2 Discuss, agree and record recommendations to improve assessment practice

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.3, 1.4, 2.3, 2.4, 2.5, 2.6, 2.7	Analyses and interprets relevant policies and procedures, benchmarks and validation materials
Writing	1.1, 3.2	Records key information from the validation process accurately to meet requirements
Oral Communication	1.1, 1.4, 2.1, 2.2, 3.1, 3.2	Communicates with others to confirm approaches, exchange ideas and information, articulate opinions, and reach agreement with others, using suitable tone, style and language
Navigate the world of work	1.1	Identifies, confirms and takes responsibility for adherence to policies and procedures
Interact with others	1.1, 2.1, 2.2, 3.1, 3.2	Collaborates with others and contributes to activities requiring joint responsibility and accountability
Get the work done	1.1, 1.2, 1.3, 1.4, 2.3, 2.4, 2.5, 2.6, 2.7, 3.2	- Organises and prioritises work commitments with a sense of what is achievable within the timeframe - Uses analytical processes in non-routine situations gathering information, and identifying and evaluating options against agreed criteria

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
TAEASS403 Participate in assessment validation	TAEASS403B Participate in assessment validation	Updated to meet Standards for Training Packages. Revised performance criteria.	No equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

Assessment Requirements for TAEASS403 Participate in assessment validation

Modification History

Release	Comments
Release 2	This was first released with <i>TAE Training and Education Training Package Release 2.1</i> . Updates to Assessment Conditions.
Release 1	This version first released with <i>TAE Training and Education Training Package Release 2.0</i>

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in the elements and performance criteria of this unit, including:

- actively participating in a minimum of three validation sessions that address the critical aspects of validation
- clearly identifying the purpose for each validation, and the legal and ethical responsibilities of assessors
- collating and presenting documentation for each validation in a logical manner
- communicating and liaising with relevant people
- providing feedback and interpreting documentation in validation sessions
- recording their contribution to validation findings.
-

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge to effectively complete the task outlined in the elements and performance criteria of this unit. This includes knowledge of:

- how to determine the evidence needed to demonstrate competence in a competency-based environment
- the reasons for carrying out validation and different approaches to validation that may be appropriate before, during and after an assessment
- the components of assessment tools
- critical aspects of validation, including validation of assessment processes, methods and products
- how principles of assessment are addressed in validation

- how rules of evidence are addressed in validation
- work health and safety legislation, codes of practice, standards and guidelines that impact on assessment
- obligations of an assessor under applicable legislation and/or standards, particularly in relation to validation activities.
-

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Conditions must be typical of those experienced in the training and assessment environment, and include access to:

- the texts and tasks usually found in the workplace
- units of competency and other materials used in validation sessions.

Assessors must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

TAEDEL301 Provide work skill instruction

Modification History

Release	Comments
Release 1	This version first released with <i>TAE Training and Education Training Package Version 2.0</i> .

Application

This unit describes the skills and knowledge required to conduct individual and group instruction, demonstrate work skills and assess the success of training and one's own training performance, using existing learning resources in a safe and comfortable learning environment.

It emphasises the training as being driven by the work process and context, and applies to a person working under supervision as a work skill instructor in a wide range of settings not restricted to training organisations,

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Delivery and facilitation

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Organise instruction and demonstration	1.1 Gather information about learner characteristics and learning needs 1.2 Confirm a safe learning environment 1.3 Gather and check instruction, demonstration objectives, and seek assistance if required 1.4 Access and review relevant learning resources and learning

ELEMENT	PERFORMANCE CRITERIA
	materials for suitability and relevance, and seek assistance to interpret the contextual application 1.5 Organise access to necessary equipment or physical resources required for instruction and demonstration 1.6 Notify learners of details regarding the implementation of the learning program and/or delivery plan
2. Conduct instruction and demonstration	2.1 Use interpersonal skills with learners to establish a safe and comfortable learning environment 2.2 Follow the learning program and/or delivery plan to cover all learning objectives 2.3 Brief learners on any workplace health and safety (WHS) procedures and requirements prior to, and during, training 2.4 Use delivery techniques to structure, pace and enhance learning 2.5 Apply coaching techniques to assist learning 2.6 Use communication skills to provide information, instruct learners and demonstrate relevant work skills 2.7 Provide opportunities for practice during instruction and through work activities 2.8 Provide and discuss feedback on learner performance to support learning
3. Check training performance	3.1 Use measures to ensure learners are acquiring, and can use, new technical and generic skills and knowledge 3.2 Monitor learner progress and outcomes in consultation with the learner 3.3 Review relationship between the trainer/coach and the learner, and adjust to suit learner needs
4. Review personal training performance	4.1 Reflect upon personal performance in providing instruction and demonstration, and document strategies for improvement 4.2 Maintain, store and secure learner records, according to organisational and legal requirements

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Learning	4.1	Reflects on practice to improve
Reading	1.1, 1.3, 1.4, 2.2	Sources and interprets processes and procedures, learning resources and information relevant to providing a work instruction and delivery
Writing	1.4, 1.6, 2.3, 2.6, 2.8, 3.2, 4.1, 4.2	Accurately maintains learner records and documentation appropriate to the learning context and audience
Oral Communication	1.1, 1.6, 2.3, 2.4, 2.6	Uses appropriate communication strategies to engage, build rapport, provide instruction, monitor progress and provide feedback to individuals or groups
Interact with others	1.2, 1.3, 2.1, 2.5, 2.8, 3.2	- Recognises the importance of consultation and negotiation while collaborating to confirm strategy and achieve required outcomes - Asks questions in order to clarify understanding, and to provide and seek feedback - Builds rapport to establish effective working relationships and to achieve effective outcomes
Get the work done	1.1-1.6, 2.1-2.8, 3.1-3.3, 4.1, 4.2	- Organises and completes work according to defined requirements, taking responsibility for some decisions and sequencing tasks to achieve efficient outcomes - Identifies and responds to potential risks, problems and opportunities for improvement and considers options for different approaches

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
TAEDEL301 Provide work skill instruction	TAEDEL301A Provide work skill instruction	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

Assessment Requirements for TAEDEL301 Provide work skill instruction

Modification History

Release	Comments
Release 1	This version first released with <i>TAE Training and Education Training Package Version 2.0</i> .

Performance Evidence

The candidate must show evidence of the ability to complete tasks outlined in the elements and performance criteria of this unit, including:

- carrying out a minimum of three training sessions, involving demonstrating and instructing particular work skills for at least two different individuals or small groups, with each session addressing:
 - different learning objectives
 - a range of delivery techniques and effective communication skills appropriate to the audience.

Knowledge Evidence

The candidate must be able to demonstrate essential knowledge to effectively complete the task outlined in the elements and performance criteria of this unit. This includes knowledge of:

- learner characteristics and needs
- the content and requirements of the relevant learning program, and/or the delivery plan
- the sources and availability of relevant learning resources and learning materials
- the content of relevant learning resources and learning materials
- training techniques that enhance learning, and when to use them
- introductory knowledge of learning principles and learning styles
- key workplace health and safety (WHS) issues in the learning environment, including:
 - roles and responsibilities of key personnel
 - responsibilities of learners
 - relevant policies and procedures, including hazard identification, risk assessment, reporting requirements, safe use of equipment and emergency procedures
 - risk controls for the specific learning environment.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Conditions must be typical of those experienced in the training and assessment environment and include access to any necessary workplace documents.

Assessors must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=35337905-785d-4f93-8777-e9991ad4c6c3>

TLIA2009 Complete and check import/export documentation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to complete and check import and export documentation in accordance with the requirements of Customs and related legislation and workplace procedures.

It includes identifying procedures required for documenting import/export of goods, completing documentation to meet legislative and workplace requirements, checking documentation to ensure it meets legislative requirements and lodging documentation for processing.

Work is performed under some supervision generally within a team environment. Work is undertaken in a range of environments including small to large worksites in the customs broking and freight forwarding industries.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1 Identify procedures required for documentation for import/export of goods	1.1 Documents required for import/export of goods are identified 1.2 Required documents are sourced 1.3 Content requirements for each section of the documentation are applied 1.4 Timelines for completion of documents are identified and noted 1.5 Requirements for permits and other documentation (such as quarantine) are identified and implications are noted 1.6 Procedures for obtaining clearances are identified and followed in accordance with the requirements of Customs, related legislation and workplace procedures 1.7 Letters of credit are identified and implications of each are noted 1.8 Assistance is sought as required to identify necessary documents and to commence process of assessing or completing these documents 1.9 Documentation is lodged as required by legislation
2 Complete documentation to meet legislative and workplace requirements	2.1 Content requirements for each section of the documentation are identified and applied in accordance with the requirements of Customs, related legislation and workplace procedures 2.2 Workplace procedures for authorisations are followed 2.3 Data entry for documents is completed 2.4 Problems arising in completing required documents are identified and assistance is sought to resolve these in accordance with the requirements of Customs, related legislation and workplace procedures 2.5 Actions are taken to meet deadlines 2.6 Assistance is sought as required in completing required documents
3 Check documentation to ensure it meets	3.1 Documents are collated and checked before forwarding to supervisor, manager or more senior personnel for checking within designated timelines, in accordance with the

legislative requirements		requirements of Customs, related legislation and workplace procedures
	3.2	Declarations are checked to ensure they meet the requirements of Customs, related legislation and workplace procedures
	3.3	Letters of credit are checked to ensure they meet commercial, transport and overseas requirements
	3.4	Dangerous goods documentation is checked in accordance with the requirements of Customs, related legislation and workplace procedures
	3.5	Document revisions are finalised, rechecked and forwarded to supervisor, manager or more senior personnel prior to lodgement
4 Lodge documentation for processing	4.1	Documents are forwarded to relevant personnel in accordance with the requirements of Customs, related legislation and workplace procedures
	4.2	Documents are filed, stored and retained in accordance with the requirements of Customs, related legislation and workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA2009A Complete and check import/export documentation.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA2009 Complete and check import/export documentation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- communicating and working effectively with others when completing import and export documentation
- completing and checking documentation and records to meet relevant Customs legislation, related legislation and workplace requirements
- completing and/or assessing accuracy of import and export documentation
- identifying procedures required for documentation for import/export of goods
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- providing customer/client service
- reading, interpreting and following import and export instructions, procedures and labels
- reporting and/or rectifying identified problems promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using relevant communications, computing and office equipment when completing import and export documentation.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian and international standards, codes, conventions and regulations relevant to importing and exporting cargo and freight
- Customs Act 1901 and related legislation
- documentation requirements for importing and exporting cargo and freight
- focus of operation of work systems, equipment, management and site operating systems for completing import/export cargo and freight documentation

- problems that may occur when completing import and export documentation and appropriate action that can be taken to resolve these problems
- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental protection procedures and guidelines
- workplace procedures and policies for completing import and export documentation.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.
-

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA2014 Use product knowledge to complete work operations

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to use product knowledge to complete work operations in accordance with workplace requirements and relevant regulations, as part of work activities within the transport and logistics industries.

It includes identifying products in a subsection of a warehouse or other storage area, examining quality, reporting on products, as well as using inventory and labelling systems to identify and locate products.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Identify products in a

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Products are identified against specified criteria in

subsection of a warehouse or other storage area	accordance with workplace procedures
	1.2 Storage and handling characteristics are identified and applied consistently
	1.3 Products are described to internal customers identifying features that may affect location, safety or storage requirements
2 Examine quality and report on products	2.1 Products are inspected in accordance with workplace quality assurance procedures
	2.2 Workplace procedures are followed to replace, return or dispose of stock/products that are not useable
	2.3 Non-conforming products are recorded/reported in accordance with workplace procedures
3 Use inventory and labelling systems to identify and locate products	3.1 Inventory and labelling systems are used to locate products within the workplace
	3.2 Goods are physically located and identified

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA2014A Use product knowledge to complete work operations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA2014 Use product knowledge to complete work operations

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- adapting to differences in products and services in accordance with standard operating procedures
- applying relevant legislation and workplace procedures
- communicating and working effectively with others when handling, transporting and storing products and providing information on products and services
- completing documentation related to work activities
- estimating the size, shape and special requirements of goods and loads
- identifying containers and goods coding, Australian Dangerous Goods (ADG) and International Maritime Dangerous Goods (IMDG) markings and where applicable, emergency information panels
- reading and comprehending simple statements in English
- reading, interpreting and following instructions, procedures, information and signs relevant to handling, transporting, storing products and providing information on products and services
- selecting and using relevant communications, computing and load handling equipment
- selecting and using required personal protective equipment conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian codes and regulations relevant to products being identified, handled, transported, stacked and/or stored as part of work operations
- categories or groups of products and requirements for special handling, stacking and storage
- documentation requirements including reports and records concerning damaged or contaminated goods
- focus of operation of work systems, equipment, management and site operating systems for packaging goods
- housekeeping standards and procedures
- purpose and use of cataloguing and labelling systems
- site layout and obstacles
- strategies to seek out sources of product knowledge and to use this information to inform work
- types of equipment and storage areas appropriate for different categories of goods including perishable, fragile, dangerous, composition/state goods
- workplace procedures and policies for identifying, handling, stacking and storing particular categories of products.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.
-

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA2021 Despatch stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to despatch stock in accordance with codes/regulations and workplace requirements as part of work activities undertaken within the transport and logistics industry.

It includes analysing orders to identify work requirements, following workplace order picking processes to prepare goods for despatch, and completing despatch tasks in accordance with workplace procedures and schedules.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Analyse order to identify

1.1 Order request and consignment note documentation is

work requirements	interpreted
	1.2 Required schedules for despatch are identified
	1.3 Product(s) in order are identified
	1.4 Workplace and product knowledge is used to plan sequence of work
	1.5 Appropriate materials handling equipment is selected within required work health and safety (WHS)/occupational health and safety (OHS) regulations and timeframe for the despatch
2 Follow workplace order picking processes to prepare goods for despatch	2.1 Goods for despatch are selected and checked against product knowledge, labels and other identification systems
	2.2 Products are sorted, assembled and consolidated
	2.3 Orders are secured and placed in storage/despatch zones, in accordance with schedule
	2.4 Order is checked against despatch schedule and order form
3 Complete despatch following workplace procedures and schedules	3.1 Workplace records are completed, and labels and appropriate documentation are attached
	3.2 Load labels and documentation are checked and loading is organised in accordance with workplace procedures and Australian Dangerous Goods (ADG) Code as required
	3.3 Final check of load labels and documentation is completed in accordance with requirements
	3.4 Transportation requirements are communicated to driver as required

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA2021A Despatch stock.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA2021 Despatch stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- applying relevant legislation and workplace procedures
- communicating and working effectively with others when organising despatch operations
- completing documentation related to organising despatch operations
- estimating size, shape and special requirements of goods and loads
- modifying activities depending on operational contingencies, risk situations and environments
- operating and adapting to differences in goods and equipment in accordance with standard operating procedures
- reading, interpreting and following instructions, procedures and labels relevant to organising despatch operations
- selecting and using relevant equipment and communications technology when organising despatch operations
- selecting and using required personal protective equipment conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- documentation and record requirements for despatch operations
- equipment used during despatch operations and the precautions and procedures that should be followed in its use
- housekeeping standards and procedures
- operational work systems, equipment, management and site operating systems for despatching goods
- problems that may occur when despatching goods and appropriate action that can be taken to resolve these problems
- regulations relevant to despatch operations, including the Australian Dangerous Goods (ADG) Code and relevant bond, quarantine or other legislative requirements
- relevant WHS/OHS and environmental protection procedures and guidelines
- site layout and obstacles
- workplace procedures and policies for organising despatch operations.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.
-

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3015 Complete receival/despatch documentation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to complete receival/despatch documentation in accordance with relevant regulations and workplace requirements as part of work activities within the transport and logistics industry.

It includes analysing orders to identify work requirements to fill order, following workplace order documentation processes, and finalising documentation in accordance with workplace procedures and any relevant regulatory requirements.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1 Analyse order to identify work requirements to fill order

- 1.1 Order request documentation is interpreted
- 1.2 Product/s in order are noted and workplace location/s are identified
- 1.3 Workplace and product knowledge are used to organise documentation
- 1.4 Required schedules for order movement are identified and noted as required
- 1.5 Special aspects of order such as dangerous/hazardous goods or temperature controlled goods are identified and information on required documentation procedures and relevant regulatory requirements is identified, accessed and interpreted

2 Follow workplace order documentation processes

- 2.1 Workplace procedures for order documentation are identified
- 2.2 Workplace documentation is completed in accordance with workplace procedures and relevant regulatory requirements

3 Finalise documentation

- 3.1 Order is checked against schedule and order form
- 3.2 Workplace records are completed, and labels and appropriate documentation are attached in accordance with workplace procedures and relevant regulatory requirements
- 3.3 Special transportation requirements are identified and conveyed to appropriate personnel
- 3.4 Required documentation for dangerous goods and hazardous materials is completed in accordance with relevant regulations and current Australian Dangerous Goods (ADG) Code, as required

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3015A Complete receival/despatch documentation.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3015 Complete receival/despatch documentation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- communicating effectively with others
- completing receival and despatch documentation
- estimating size, shape and special requirements of goods and loads
- identifying containers and goods coding, Australian Dangerous Goods (ADG) Code markings and emergency information panels
- monitoring work activities in terms of planned schedule
- reading and interpreting relevant instructions, procedures and labels
- selecting and using relevant computer, communications and office equipment
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian and International Standards, codes and regulations relevant to completing receival/despatch documentation, including current ADG Code and relevant bond, quarantine or other legislative requirements
- documentation requirements for receiving and despatching goods
- focus of operation of work systems, equipment, management and site operating systems for receiving and despatching goods
- housekeeping standards and procedures
- problems that may occur when completing receival and despatch documentation and

appropriate action that can be taken to resolve these problems

- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental protection procedures and guidelines
- site layout and obstacles
- specifications and standards for checking and inspecting received and despatched goods
- workplace procedures and policies for completing receival/despatch documentation.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, ADG Code, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3016 Use inventory systems to organise stock control

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to use inventory systems to organise stock control in accordance with relevant regulations and workplace requirements, as part of work activities in the transport and logistics industry.

It includes identifying inventory and stock control systems in use in the workplace, using re-order procedures to maintain stock levels, organising cyclical stock counts and reporting discrepancies or variances.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Identify inventory

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Workplace inventory and stock control equipment, software

and stock control systems in use in the workplace		and systems are identified
	1.2	Reasons for common database approach to inventory records and documentation in the warehouse are explained
	1.3	Procedures for identifying and reporting discrepancies or variances are identified
2 Use re-order procedures to maintain stock levels	2.1	Stock level maintenance checking is conducted
	2.2	Stock is re-ordered to meet stock level maintenance requirements in accordance with workplace policies and procedures
	2.3	Data is accurately entered and extracted from the inventory/records system using appropriate workplace procedures
3 Organise cyclical stock counts and report discrepancies or variances	3.1	Process for cyclical stock count is planned and work is allocated to team members
	3.2	Clear directions on tasks to be performed are given
	3.3	Stocktake activities are conducted in accordance with workplace procedures
	3.4	Types and causes of record discrepancies are identified
	3.5	Procedures for noting and correcting minor discrepancies are used
	3.6	Major discrepancies are reported in accordance with workplace procedures
	3.7	Workplace documentation is completed
4 Produce reports on record keeping and inventory functions	4.1	Types of reports to be produced from inventory records systems are identified
	4.2	Reports are produced in accordance with workplace procedures and relevant regulatory requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3016A Use inventory systems to organise stock control.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3016 Use inventory systems to organise stock control

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- communicating effectively with others
- modifying activities depending on operational contingencies, risk situations and environments
- operating and adapting to differences in equipment in accordance with standard operating procedures
- reading, interpreting and following relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with workplace procedures
- selecting and using relevant communications, computing and office equipment
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- applications of different types of inventory systems and stock management approaches
- Australian codes and regulations relevant for organising stock control
- computer records and documentation requirements for stock control, including forms, checklists and inventory reports
- housekeeping standards and procedures
- operational inventory systems, equipment, management and site operating systems for controlling stock
- principles of operation and functions of inventory systems
- workplace procedures and policies for using inventory systems to organise stock control
- workplace processes for records management and producing inventory reports.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in *the Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

- Resources for assessment include:
- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3018 Organise despatch operations

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to organise despatch operations in accordance with codes/regulations and workplace requirements in the transport and logistics industry.

It includes planning and organising despatch operations, organising the storage and despatch of stock, and completing all required documentation and records.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan and organise despatch operations

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Knowledge of product characteristics and workplace procedures are applied to stock analysis

- 1.2 Resources including manual handling equipment, employee competencies, storage areas and goods management equipment are identified to match product characteristics
- 1.3 Deadlines are scheduled to meet order requirements
- 1.4 Work processes are planned to meet deadlines
- 2 Organise the storage and despatch of stock**
 - 2.1 Employees, equipment and storage areas are allocated and supervised
 - 2.2 Individuals are informed of work requirements and deadlines
 - 2.3 Work processes are monitored to ensure that human resources and equipment are maintained at productive levels in accordance with workplace procedures and work health and safety (WHS)/occupational health and safety (OHS) requirements
 - 2.4 Stock discrepancies are noted and reported in accordance with company procedures
- 3 Complete documentation**
 - 3.1 Required despatch documentation and records are confirmed
 - 3.2 Required despatch documentation and records are completed clearly and proofread
 - 3.3 Required despatch documentation and records are processed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3018A Organise despatch operations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3018 Organise despatch operations

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- communicating and working effectively with others
- estimating size, shape and special requirements of goods and loads
- identifying relevant stock and goods coding and labelling, including Australian Dangerous Goods (ADG) Code and International Maritime Dangerous Goods (IMDG) Code markings
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in equipment in accordance with operating procedures
- reading, interpreting and following relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using relevant equipment and communications technology
- selecting and using required personal protective equipment conforming to industry and WHS/OHS standards.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- documentation and record requirements for despatch operations
- equipment used when organising despatch operations, and the precautions and procedures that should be followed in its use
- housekeeping standards and procedures
- operational work systems, equipment, management and site operating systems for organising despatch operations
- problems that may occur and appropriate action that can be taken to resolve these problems
- regulations relevant for organising despatch operations, including the ADG Code and relevant bond, quarantine or other legislative requirements
- relevant WHS/OHS and environmental protection procedures and guidelines
- site layout and obstacles
- workplace procedures and policies for organising despatch operations.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3019 Organise receival operations

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to organise receival operations in accordance with regulations, codes of practice and workplace requirements in the transport and logistics industry.

It includes planning and organising receival operations, storing received stock and completing all required documentation and records.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan and organise receival operations

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Knowledge of product characteristics and workplace procedures are applied to stock analysis

- 1.2 Resources including manual handling equipment, employee competencies, storage areas and goods management equipment are identified to match product characteristics
 - 1.3 Deadlines are scheduled to enable receival of stock in storage zones
 - 1.4 Work processes are planned to meet specified deadlines
- 2 Organise the storage of stock**
 - 2.1 Employees, equipment and storage areas are allocated and supervised
 - 2.2 Individuals are informed of work requirements and deadlines
 - 2.3 Work processes are monitored to ensure human resources, and equipment are maintained at productive levels in accordance with workplace procedures and work health and safety (WHS)/occupational health and safety (OHS) requirements
 - 2.4 Discrepancies in stocks are noted and reported in accordance with workplace procedures
- 3 Complete documentation**
 - 3.1 Documentation and records regarding receival operations are confirmed
 - 3.2 Documentation and records are completed clearly and proofread
 - 3.3 Documentation and records are filed/despached in accordance with workplace procedures and relevant regulatory requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3019A Organise receipt operations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3019 Organise receipt operations

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- communicating and working effectively with others
- estimating size, shape and special requirements of goods and loads
- identifying relevant stock and goods coding and labelling, including Australian Dangerous Goods (ADG) Code and International Maritime Dangerous Goods (IMDG) Code markings
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in equipment in accordance with operating procedures
- reading and interpreting relevant instructions, procedures and labels
- selecting and using relevant equipment and communications technology
- selecting and using required personal protective equipment conforming to industry and WHS/OHS standards.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- documentation and record requirements for receipt operations
- equipment used for organising receipt operations, and the precautions and procedures that should be followed in its use
- housekeeping standards and procedures

- operational work systems, equipment, management and site operating systems for organising receival operations
- problems that may occur and appropriate action that can be taken to resolve these problems
- regulations relevant for organising receival operations, including the ADG Code and relevant bond, quarantine or other legislative requirements
- relevant WHS/OHS and environmental protection procedures and guidelines
- site layout and obstacles
- workplace procedures and policies for organising receival operations.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3026 Monitor storage facilities

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to monitor storage facilities in accordance with relevant regulations and workplace requirements in the transport and logistics industry.

It includes determining site functions and operations, monitoring storage operations and taking appropriate action in response to identified discrepancies, changes to storage requirements or breaches in operational procedures.

Work is performed under general supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Determine site

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Layout of storage facilities, work flow and activities undertaken

functions and operations

in each zone are identified

- 1.2 Hazards are identified, risks are assessed and control measures are implemented
- 1.3 Type of storage facilities, their purpose and associated risk factors are identified
- 1.4 Inventory lists are accessed through record management system
- 1.5 Storage separations and co-storage applications are identified

2 Monitor storage operations

- 2.1 Inventory data is confirmed to match goods/freight and applicable storage requirements
- 2.2 Storage areas are supervised to ensure movement of personnel and goods/freight are in accordance with workplace procedures
- 2.3 Storage facilities are checked to ensure appropriate operational capacity
- 2.4 Integrity of goods/materials are monitored to ensure appropriate quality is maintained
- 2.5 Discrepancies/changes to storage requirements and/or inventory lists are noted and action is undertaken in accordance with workplace procedures
- 2.6 Appropriate action/s are initiated in response to breaches of operational procedures or to an emergency/incident
- 2.7 Operational actions and investigative outcomes are documented in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3026A Monitor storage facilities.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3026 Monitor storage facilities

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating and working effectively with others
- completing relevant documentation
- monitoring equipment performance
- operating and adapting to differences in equipment in accordance with operating procedures
- reading, interpreting and following relevant instructions, procedures and signs
- using information on products and stock to determine, plan and organise processes used for monitoring storage facilities.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian codes and regulations, permit and licence requirements relevant to workplace activities
- equipment applications, capacities, configurations, safety hazards and control mechanisms
- operational work systems, equipment, management and site operating systems
- housekeeping standards and procedures
- information on various categories or groups of products including their key characteristics and hazards, and the special handling, stacking and storage requirements for each
- problems that may occur and appropriate action that can be taken
- relevant work health and safety (WHS)/occupational health and safety (OHS) and environmental protection procedures and guidelines

- requirements for workplace documentation reports and records
- site layout
- types of storage areas and related equipment appropriate for different types of goods including perishable, fragile and/or hazardous/dangerous goods
- workplace procedures and policies relevant to the monitoring of storage facilities.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3038 Control and order stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to control and order stock for a workplace store in accordance with relevant codes of practice, regulations and workplace procedures.

It specifically covers maintaining stock levels and records, organising and administering stocktakes, identifying stock losses, processing stock orders and following up orders.

Work is performed under general supervision, with some accountability and responsibility for self and others in achieving prescribed outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Maintain stock levels

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Stock levels are monitored and maintained at levels

- and records** prescribed by workplace specifications
- 1.2 Stock security systems are monitored and adjusted as required
 - 1.3 Stock re-order cycles are maintained, monitored and adjusted as required
 - 1.4 Colleagues are informed about their individual responsibilities for recording stock
 - 1.5 Stock storage and movement records are maintained in accordance with workplace procedures
 - 1.6 Stock performance is monitored and fast/slow moving items are identified and reported in accordance with workplace procedures
- 2 Organise and administer stocktakes**
- 2.1 Stocktakes are organised at the appropriate time and responsibilities are allocated to staff
 - 2.2 Accurate reports on stocktake data are produced within designated timelines
- 3 Identify stock losses**
- 3.1 Losses are accurately identified, recorded and assessed against potential loss as forecast, on a regular basis
 - 3.2 Identified losses are reported in accordance with workplace procedures
 - 3.3 Avoidable losses are identified, reasons are established, and appropriate solutions are recommended and implemented to prevent future avoidable losses
- 4 Process stock orders**
- 4.1 Orders for stock are accurately processed in accordance with workplace procedures
 - 4.2 Stock ordering and recording systems are accurately maintained
 - 4.3 Purchase and supply agreements are correctly used and appropriate details are recorded
 - 4.4 Negotiated purchase and supply agreements are recorded accurately and filed for retrieval
- 5 Follow up orders**
- 5.1 Delivery process is monitored to meet agreed deadlines
 - 5.2 Appropriate liaison is undertaken with colleagues and suppliers to ensure continuity of supply

5.3 Routine supply problems are followed up or referred to the appropriate person in accordance with workplace policy

5.4 Stock is distributed in accordance with agreed allocations

6 Complete documentation

6.1 Required records and documentation are confirmed

6.2 Required records and documentation are completed clearly and proofread

6.3 Required records and documentation are processed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3038A Control and order stock.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3038 Control and order stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- adapting to differences in stock and systems in accordance with standard operating procedures
- applying relevant legislation and workplace procedures
- communicating and working effectively with others
- monitoring stock levels
- reading and interpreting relevant instructions, procedures and labels
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using relevant communications and computing equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- contacts and sources of information and documentation needed when controlling and ordering stock
- customer service policies and procedures
- how to interpret workplace specifications and orders for supplies
- principles of stock control
- problems that may occur and appropriate action that can be taken to resolve these problems
- procedures for ordering stock
- protocols and procedures for liaising with supplier representatives, drivers and colleagues using appropriate technology
- relevant codes of practice and legislative requirements (for example dangerous goods regulations, health and hygiene regulations)

- site layout
- stock control documentation and systems used in workplace stores
- stock security systems
- systems for completing relevant records and documentation.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA3039 Receive and store stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to receive and store stock for a workplace store in an enterprise/organisation in a transport, logistics, production, hospitality, retail or other relevant industry sector, in compliance with relevant codes of practice, regulations and workplace procedures.

Work must be carried out for receiving and storing stock in a workplace store. It specifically covers taking delivery of stock, storing, rotating and maintaining stock received, and completing documentation.

Work is performed under general supervision, with some accountability and responsibility for self and others in achieving the prescribed outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1 Take delivery of stock

- 1.1 Incoming stock is accurately checked against orders and delivery documentation in accordance with workplace procedures
- 1.2 Variations are accurately identified, recorded and communicated to appropriate person
- 1.3 Items are inspected for damage, quality, use-by dates, breakages and discrepancies, and records are made in accordance with workplace policy

2 Store stock

- 2.1 Hazards are identified, risks are assessed and control measures are implemented
- 2.2 Stock is promptly and safely transported to appropriate storage area without damage
- 2.3 Stock is stored in appropriate location within area and in accordance with workplace security procedures
- 2.4 Appropriate personal protective equipment is correctly used during receipt and storage operations
- 2.5 Stock levels are accurately recorded in accordance with workplace procedures
- 2.6 Stock is labelled in accordance with workplace procedures

3 Rotate and maintain stock

- 3.1 Stock is rotated as required in accordance with workplace policy
- 3.2 Stock is moved using appropriate equipment in accordance with work health and safety (WHS)/occupational health and safety (OHS) requirements, relevant regulations and workplace procedures
- 3.3 Quality of stock is checked and reported
- 3.4 Appropriate action is taken where stock quality is identified as outside specified standards
- 3.5 Stock is placed in storage or disposed of in accordance with workplace policy

4 Complete documentation

- 4.1 Required documentation procedures and processes are confirmed
- 4.2 Records and documentation are completed legibly and proofread
- 4.3 Records and documentation are processed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA3039A Receive and store stock.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA3039 Receive and store stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- communicating and working effectively with others
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in equipment in accordance with standard operating procedures
- reading and interpreting relevant instructions, procedures and labels
- selecting and using relevant communications and computing equipment
- selecting and using required personal protective equipment conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- contacts and sources of information and documentation needed when receiving and storing stock
- customer service policies and procedures
- interpretation of workplace specifications and orders for supplies
- principles of stock control
- problems that may occur when receiving and storing stock and appropriate action that can be taken to resolve these problems
- procedures for operating electronic communications equipment
- protocols and procedures for liaising with supplier representatives, drivers and colleagues using appropriate technology

- purpose and procedures for using relevant personal protective equipment
- relevant codes of practice and legislative requirements (for example dangerous goods regulations, health and hygiene regulations)
- relevant WHS/OHS and environmental procedures and regulations
- safe lifting and handling procedures
- site layout
- stock control documentation and systems used in workplace stores
- stock security systems
- systems for completing relevant records and documentation.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIA4025 Regulate temperature controlled stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to regulate temperature controlled stock in accordance with relevant regulations and workplace procedures within the transport and logistics industry.

It includes identifying goods requiring temperature control, monitoring temperature of goods, and identifying and rectifying identified problems.

Work is performed under some supervision generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo/Stock

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1 Identify goods requiring temperature control

- 1.1 Goods requiring temperature control are identified
- 1.2 Temperature for short-term and long-term storage is selected to match product type
- 1.3 Upper and lower limits for temperature control are identified
- 1.4 Storage separations and co-storage applications are identified for products

2 Monitor temperature

- 2.1 Appropriate methods for determining temperature of goods are identified
- 2.2 Job hazards are identified and required action is taken to minimise, control or eliminate identified hazards
- 2.3 Storage areas are monitored for temperatures within range for product types
- 2.4 Products are monitored to ensure compliance with temperature storage requirements
- 2.5 Short-term storage times are identified for transit goods
- 2.6 Documentation is completed in accordance with workplace procedures

3 Identify and rectify problems

- 3.1 Implications of incorrect temperature are identified
- 3.2 Damaged goods are identified and appropriate action is taken in accordance with workplace procedures
- 3.3 Causes of out-of-temperature range are identified
- 3.4 Appropriate personnel are notified for problem rectification
- 3.5 Goods handling workplace procedures for maintenance of stock under temperature control are identified and implemented

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIA4025A Regulate temperature controlled stock.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIA4025 Regulate temperature controlled stock

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation and workplace procedures
- checking refrigeration equipment operation in terms of maintenance schedule and standard operating procedures
- communicating effectively with others
- implementing contingency plans
- operating and adapting to differences in stock and equipment in accordance with workplace procedures
- reading and interpreting relevant instructions, procedures and labels
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using relevant equipment, processes and procedures
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- focus of operation of work systems, equipment, management and site operating systems for regulating temperature controlled stock
- hazards when regulating and working with temperature controlled stock and appropriate action to control the risks involved
- problems that can occur with temperature controlled stock and appropriate action that can be taken
- procedures for pre-cooling and snap freezing

- relevant codes of practice, food safety standards and regulations for temperature controlled stock
- relevant work health safety (WHS)/occupational health and safety (OHS) and environmental protection procedures and guidelines
- special handling, stacking and storage requirements for temperature controlled stock
- workplace procedures and policies for regulating temperature controlled stock.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, food safety standards, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLID2003 Handle dangerous goods/hazardous substances

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to handle dangerous goods and hazardous substances in accordance with relevant work health safety (WHS)/occupational health and safety (OHS) regulations concerning the safe handling of dangerous goods and hazardous substances, within the transport and logistics industry.

It includes identifying requirements for working with dangerous goods and/or hazardous substances, confirming site incident procedures and selecting handling techniques.

Work is performed under general supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

D – Load Handling

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to

essential outcomes.

demonstrate achievement of the element.

1 Identify requirements for working with dangerous goods and/or hazardous substances	1.1 Dangerous goods/hazardous substances are identified from information including class labels, manifests and other documentation 1.2 Job hazards are identified and required action is taken to minimise, control or eliminate identified hazards 1.3 Storage requirements for dangerous goods/hazardous substances are identified and applied 1.4 Legislative requirements for dangerous goods/hazardous substances are used to plan work activities 1.5 Handling procedures for different classes and characteristics of goods are observed 1.6 Confirmation is sought from relevant personnel where dangerous goods/hazardous materials do not appear to be appropriately marked
2 Confirm site incident procedures	2.1 Incident reporting processes are identified 2.2 Emergency equipment is located and checked in accordance with workplace procedures and statutory regulations 2.3 Emergency procedures are identified and confirmed
3 Select handling techniques	3.1 Load handling and shifting procedures are selected in accordance with identified requirements for particular goods 3.2 Handling equipment is checked for conformity with workplace requirements and manufacturer guidelines 3.3 Suitable signage or placards are checked for compliance with workplace procedures, as required

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLID2003A Handle dangerous goods/hazardous substances.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLID2003 Handle dangerous goods/hazardous substances

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- communicating and working effectively with others
- completing relevant documentation
- determining required permits
- estimating weight and dimensions of load and any special requirements
- identifying and assessing handling and storage precautions and requirements for dangerous goods/hazardous substances
- identifying and selecting safety requirements for handling dangerous goods/hazardous substances
- identifying containers and goods coding, markings and emergency information panels for mode of transport storage selected
- identifying dangerous goods/hazardous substances using labels, International Maritime Dangerous Goods (IMDG) Code markings, HAZCHEM signs and other relevant identification criteria
- identifying job and site hazards, and planning work to minimise risks
- implementing contingency plans
- maintaining workplace records and documentation
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring and prioritising work activities in terms of planned schedule, predicting consequences and identifying improvements
- operating and adapting to differences in equipment in accordance with standard operating procedures
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant instructions, procedures, regulations, information and signs
- recognising hazards and applying precautions and required action to minimise, control or eliminate recognised hazards
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures

- selecting and using required personal protective equipment (PPE) conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- selecting appropriate equipment and work systems including PPE
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- equipment applications, capacities, configurations, safety hazards and control mechanisms
- housekeeping standards and procedures
- permit and licence requirements
- problems that may arise when handling of dangerous goods and hazardous substances and actions that should be taken to prevent or solve these problems
- relevant aspects of current Australian Dangerous Goods (ADG) Code and relevant Australian Standards
- relevant regulations and codes concerning handling dangerous goods/hazardous substances
- risks when handling dangerous goods/hazardous substances and related precautions to control risk
- workplace procedures for handling and storing dangerous goods/hazardous substances.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy

requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, current ADG Code, codes of practice and operation manuals
- relevant materials, tools, equipment, and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLID2004 Load and unload goods/cargo

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to load and unload goods and cargo in accordance with relevant state/territory roads and traffic authority regulations/permit requirements.

It includes loading and unloading goods and cargo, securing and protecting a load and completing all required documentation.

Work is performed under general supervision within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

D – Load Handling

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Load and unload goods/cargo	1.1 Load characteristics are identified and taken into account when determining appropriate loading and unloading workplace procedures 1.2 Job hazards are identified and required action is taken to minimise, control or eliminate identified hazards 1.3 Dangerous or hazardous goods are identified and handled in accordance with the current Australian Dangerous Goods (ADG) Code and other relevant regulations/permit requirements 1.4 Load is packed/unpacked to make safe and effective use of available spaces 1.5 Goods/cargo are loaded in accordance with relevant mass and loading regulations and workplace procedures 1.6 Lifting aids and appliances are selected and used to aid loading procedures in accordance with workplace procedures and safety legislation 1.7 Unloading activities are conducted in a safe and efficient manner taking into account suitable locations, stowage, safe use of equipment and balance of remaining load 1.8 Goods requiring special handling and/or documentation are identified and workplace procedures are followed 1.9 Relocated material is restacked appropriate for transport method, safe height, weight loading, size and crushability of goods
2 Secure and protect load	2.1 Load distribution is checked to ensure it is even, legal and within safe working capacity 2.2 Load is checked to ensure dangerous goods and hazardous substances are appropriately segregated in accordance with current ADG Code 2.3 Load is secured using correct load restraint and protection equipment for different loads, carrying and storage conditions 2.4 Load is protected in accordance with legal and workplace safety requirements
3 Complete	3.1 Load is inspected and checked for security to travel, in accordance with relevant regulations/permit requirements

documentation

and current ADG Code, as required

- 3.2 All required goods documentation is completed in accordance with workplace requirements including current ADG Code, as required

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLID2004A Load and unload goods/cargo.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLID2004 Load and unload goods/cargo

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying required action to minimise, control or eliminate identified hazards
- completing relevant documentation
- estimating load size, shape and special requirements and taking appropriate action
- identifying containers and goods coding, Australian Dangerous Goods (ADG) and International Maritime Dangerous Goods (IMDG) Code markings and emergency information panels, and taking appropriate action
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring work activities in terms of planned schedule
- operating and adapting to differences in cargo and equipment in accordance with operating procedures
- reporting and/or rectifying identified problems promptly, in accordance with regulatory requirements and workplace procedures
- reading and interpreting relevant instructions, procedures, information, signs and labels
- applying relevant legislation and workplace procedures
- selecting and using required personal protective equipment conforming to industry and work health safety (WHS)/occupational health and safety (OHS) standards
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- chain of responsibility workplace procedures
- housekeeping workplace procedures
- national load restraint guidelines
- problems that may arise when loading and unloading goods and cargo and actions that should be taken to prevent or solve these problems
- relevant Australian and international regulations and codes of practice for handling and transporting dangerous goods and hazardous substances
- relevant Australian Standards and regulations including state/territory mass and loading regulations
- risks when loading and unloading goods/cargo and related precautions to control risk
- safe work methods for securing load
- security awareness requirements when loading and unloading vehicles and in particular recognising, isolating and reporting suspicious cargo and goods
- site layout and obstacles
- WHS/OHS procedures and guidelines concerning the lifting and movement of loads
- workplace procedures and policies for loading and unloading goods/cargo.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, national Load Restraint Guide (LRG), codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in

industry.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLID2010 Operate a forklift

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to operate a forklift in compliance with the relevant state/territory authority licence requirements and regulations, in a variety of operational contexts.

It includes checking forklift condition, driving forklift to fulfil operational requirements, and monitoring and maintaining forklift performance and site conditions.

Assessment of this unit will usually be undertaken within a licensing examination conducted by, or under the authority of, the relevant state/territory work health and safety (WHS)/occupational health and safety (OHS) authority.

Operation of a forklift is performed under some supervision, generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

D – Load Handling

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Check forklift condition

- 1.1 Condition of forklift is checked for compliance with WHS/OHS and workplace requirements for warning devices, manufacturer specifications and nature of load shifting task
- 1.2 Attachments are checked to ensure appropriate adjustment and operation
- 1.3 Mirrors and seats are adjusted for safe operation by driver
- 1.4 Logbooks are checked and appropriate workplace documentation is completed in accordance with workplace requirements

2 Drive forklift

- 2.1 Forklift is started, steered, manoeuvred, positioned and stopped in accordance with regulations and manufacturer instructions
- 2.2 Engine power is managed to ensure efficiency and performance and to minimise engine and gear damage
- 2.3 Operational hazards are identified and/or anticipated and avoided or controlled through defensive driving and appropriate hazard control techniques
- 2.4 Forklift is driven in reverse, maintaining visibility and achieving accurate positioning
- 2.5 Forklift is parked, shut down and secured in accordance with manufacturer specifications, regulations and workplace procedures

3 Operate forklift to handle loads

- 3.1 Lifting task to be undertaken is appropriately planned, and correct lifting truck and attachments are selected
- 3.2 Load is lifted, carried, lowered and set down in accordance with WHS/OHS legislation, manufacturer specifications and company procedures

4 Monitor site conditions

- 4.1 Hazards and traffic flow are identified when selecting the most efficient route and appropriate adjustments are made
- 4.2 Site conditions are assessed to enable safe operations and to ensure no injury to people or damage to property, equipment, loads or facilities occurs

5 Monitor and maintain forklift performance

- 5.1 Performance and efficiency of vehicle operation is monitored during use
- 5.2 Defective/irregular performance and malfunctions are reported to relevant personnel
- 5.3 Forklift records are maintained/updated in accordance with workplace procedures and legislative requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLID2010A Operate a forklift.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLID2010 Operate a forklift

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- checking and replenishing fluids, and carrying out lubrication processes
- communicating and working effectively with others
- completing relevant documentation
- ensuring forklift and its equipment are maintained in terms of service schedule and standard operating procedures
- identifying points of balance and safe lifting positions on a range of loads when operating a forklift (including accessories)
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring performance of forklift and its equipment, and taking appropriate action as required
- monitoring and prioritising work activities in terms of planned schedule
- operating and adapting to differences in equipment in accordance with standard operating procedures
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective equipment conforming to industry and WHS/OHS standards
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- efficient driving techniques
- engine power management and safe operating strategies
- forklift controls, instruments and indicators, and their use
- forklift handling procedures
- high risk work licence requirements
- operating hazards and related defensive driving and hazard control techniques
- operational emergency procedures
- pre-operational checks carried out on forklift and related action
- principles of stress management when driving a forklift
- relevant duty of care requirements for operating a forklift
- relevant WHS/OHS and environmental procedures and regulations
- site layout and obstacles
- workplace operating procedures.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIJ2003 Apply grain protection measures

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to apply grain protection procedures within grain storage facilities in accordance with workplace procedures, regulations and requirements, as part of grain storage operations in the transport and logistics industry.

It includes identifying, preparing for and applying pest control measures, monitoring the application of pest control measures, ventilating fumigated storages and maintaining records in accordance with workplace requirements.

Work is performed under some supervision, generally within a team/group environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

J – Quality

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to apply pest control

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Legal and workplace requirements for fumigation are followed in accordance with work order

measures

- 1.2 Hazards are identified, risks are assessed and control measures are implemented
- 1.3 Fumigation/spray application requirements are followed using silo and grain storage information in accordance with manufacturer instructions
- 1.4 Written records are confirmed by site measurements and observations
- 1.5 Access and site specific safety requirements to meet legislation and workplace instructions are determined
- 1.6 Equipment is checked for conformance to workplace requirements and manufacturer specifications
- 1.7 Storage is checked for gas-proofing in accordance with manufacturer and workplace instructions prior to fumigation, as required

2 Apply pest control measures

- 2.1 Personal protective equipment and engineering controls are used as instructed
- 2.2 Fumigant and spray applications are applied in accordance with manufacturer and workplace instructions
- 2.3 Warning signs are placed in accordance with legislative and workplace requirements
- 2.4 Application is monitored to ensure effectiveness of operation
- 2.5 Empty fumigant containers are returned to manufacturer/retailer or are disposed of in accordance with legislative and workplace requirements
- 2.6 Baits are prepared in accordance with legislation and manufacturer instructions
- 2.7 Baits are placed in accordance with site requirements and manufacturer instructions

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIJ2003A Apply grain protection measures.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIJ2003 Apply grain protection measures

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- carrying out work in accordance with required work health and safety (WHS)/occupational health and safety (OHS) procedures and hazard control strategies, including using:
 - personal protective equipment
 - manufacturer instructions
 - fumigant and pest control chemical labels
- communicating and working effectively with others
- completing relevant documentation
- identifying pests that infest grain in grain storage facilities
- identifying, selecting and using required equipment efficiently and effectively
- implementing contingency plans
- modifying activities depending on operational contingencies, risk situations and environments
- operating and adapting to differences in equipment in accordance with operating procedures
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant instructions, procedures information and labels
- setting up and maintaining grain protection equipment
- using pest control agents in accordance with relevant Commonwealth, state/territory legislation.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- characteristics of commodity types, varieties and grades, and their identification
- emergency response procedures
- equipment applications, capacities, configurations, safety hazards and control mechanisms
- problems that may occur and appropriate action that can be taken to resolve these problems
- procedures for environmental control and disposal activities
- regulations relevant for applying grain protection measures in grain storage facilities
- relevant WHS/OHS and environmental protection procedures and guidelines
- site layout and obstacles
- storage and safe handling procedures for fumigants, chemicals and other grain protection materials
- workplace procedures and policies for applying grain protection measures.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIJ2004 Implement grain monitoring measures

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to implement grain monitoring measures within grain storage facilities in accordance with workplace procedures, regulations and requirements, as part of grain storage operations in the transport and logistics industry.

It includes installing and checking grain quality control equipment, and monitoring the quality of stored commodities in accordance with workplace requirements.

Work is performed under some supervision, generally within a team/group environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

J – Quality

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Install grain quality

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Procedures for maintaining the quality of stored grain are identified from work plans and from considering climatic

control equipment	conditions, types of storage and general environment
	1.2 Hazards are identified, risks are assessed and control measures are implemented
	1.3 Aeration equipment is installed in accordance with workplace and site requirements to maintain appropriate grain temperature and moisture content as required
	1.4 Inspection/sampling equipment and procedures are confirmed and implemented in accordance with workplace procedures
	1.5 Equipment is checked to ensure correct set up and operation
	1.6 Equipment is maintained in accordance with workplace requirements and manufacturer instructions
	1.7 Rectification of faults in equipment is undertaken in accordance with workplace procedures
2 Monitor the quality of stored commodities	2.1 Stored commodities and associated facilities are inspected for sign of damage or potential for damage
	2.2 Required repairs to facilities are reported to appropriate personnel for action
	2.3 Monitoring for pest infestations and climatic contamination/damage to grain is regularly completed in accordance with workplace sampling/inspection procedures
	2.4 Results of sampling/inspections are recorded and reported in accordance with workplace procedures
	2.5 Follow-up action to protect grain quality is undertaken in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIJ2004A Implement grain monitoring measures.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIJ2004 Implement grain monitoring measures

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating and working effectively with others
- completing relevant documentation
- identifying, selecting and efficiently and effectively using equipment needed
- implementing contingency plans
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring and prioritising work activities in terms of planned schedule
- operating and adapting to differences in equipment in accordance with standard operating procedures
- operating electronic communications equipment to required protocol
- planning own work, predicting consequences and identifying improvements
- reading, interpreting and following relevant instructions, procedures, information and signs
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective equipment conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- setting up and maintaining grain protection equipment
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and include knowledge of:

- classification procedures
- emergency response procedures
- equipment applications, capacities, configurations, safety hazards and control mechanisms
- problems that may occur and appropriate action that can be taken to resolve these problems
- procedures for environmental control and disposal activities
- regulations relevant for implementing grain monitoring measures in grain storage facilities
- relevant WHS/OHS and environmental protection procedures and guidelines
- site layout and obstacles
- storage and safe handling procedures
- workplace procedures and policies for implementing grain monitoring measures.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLIK2010 Use infotechnology devices in the workplace

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to use infotechnology devices in the workplace in accordance with the relevant work health and safety (WHS)/occupational health and safety (OHS) regulations and workplace procedures, within the transport and logistics industry.

It includes identifying infotechnology equipment and systems; setting up, using and shutting down computer based equipment and systems; and inputting, storing and presenting files/data. It also involves implementing workplace procedures for managing and securing data.

Work is performed under some supervision, generally within a team environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

K – Technology

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Identify infotechnology systems	1.1 Types of infotechnology equipment used in the

work area are identified

- 1.2 Functions of equipment, component parts and accessories are identified
- 1.3 Applications for workplace activities of different infotechnology equipment and systems are interpreted
- 1.4 Routine faults in operating systems, software applications and operator errors are identified
- 1.5 Sources of information on rectifying/reporting faults with operating equipment, systems and application are identified

2 Access and operate computer-based equipment and systems

- 2.1 Work environments and equipment are adjusted to meet ergonomic requirements and workplace policies and procedures
- 2.2 Systems are accessed and checked as required for viruses
- 2.3 Equipment is set up for work requirements in accordance with workplace procedures and manufacturers guidelines
- 2.4 Infotechnology equipment and software operating manuals and/or help screens are used to inform work practices
- 2.5 Required application software packages and accessories are selected and accessed
- 2.6 Required file and/or data to be accessed is identified
- 2.7 Files/data are filed in accordance with workplace procedures
- 2.8 Shut-down procedures for files, applications and equipment are followed

3 Input, store and present files/data

- 3.1 Data is entered using appropriate equipment, keyboard/mouse, bar code reader, touch screen or other system
- 3.2 Accurate input is confirmed
- 3.3 Files are accessed in accordance with workplace

procedures

3.4 Data is manipulated to suit work requirements and is checked for accuracy

3.5 Saved files are accessed through relevant directories

3.6 Information and disk/s are stored as required

3.7 Information is presented using computerised projection facilities as required

4 Implement workplace procedures for managing and securing data

4.1 Security procedures are followed in accordance with workplace procedures

4.2 Precautions against the loss or corruption of data are followed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIK2010A Use infotechnology devices in the workplace.

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIK2010 Use infotechnology devices in the workplace

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- accessing and/or completing electronic documentation through the use of infotechnology devices in the workplace
- adapting to differences in software and equipment in accordance with standard operating procedures
- applying precautions and required action to minimise, control or eliminate hazards that may exist when using infotechnology devices in the workplace
- applying relevant legislation and workplace procedures
- identifying and using computer equipment, software, processes and procedures required within the job context
- identifying fault-finding procedures
- implementing contingency plans when using infotechnology devices in the workplace including using security and backup software and procedures
- modifying activities depending on operational contingencies, risk situations and environments
- operating infotechnology devices used within the workplace in accordance with operational requirements
- reading and interpreting instructions, procedures, information, operational instructions and manuals relevant to using infotechnology devices in the workplace
- reporting and/or rectifying identified problems, faults or malfunctions promptly, in accordance with regulatory requirements and workplace procedures
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- work health and safety (WHS)/occupational health and safety (OHS) risks and hazards when using computer equipment for work tasks, and ways of controlling these risks/hazards
- relevant WHS/OHS procedures and guidelines for using computer equipment in the workplace
- typical problems that can occur when using infotechnology devices, and computer applications in the workplace and related appropriate action that can be taken to prevent or solve these problems
- workplace procedures for using computer equipment and application software appropriate for work role.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations, current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment include:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.
-

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

TLILIC2001 Licence to operate a forklift truck

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit specifies the skills and knowledge required to operate a forklift truck safely.

Forklift truck means a powered industrial truck equipped with lifting media made up of a mast and an elevating load carriage to which is attached a pair of fork arms or other arms that can be raised 900 mm or more above the ground, but does not include a pedestrian-operated truck or a pallet truck.

A person performing this work is required to hold a forklift truck high risk work (HRW) licence.

This unit requires a person operating a forklift truck to plan the work, conduct routine checks on a forklift truck, shift loads in a safe manner, and safely shut down and secure equipment after completing operations.

Licensing/Regulatory Information

This unit is based on the licensing requirements of Part 4.5 of the Model Work Health and Safety (WHS) Regulations, HRW and meets Commonwealth, state and territory HRW licensing requirements.

Any alteration to this unit would result in a unit that would not be acceptable to work health and safety (WHS)/occupational health and safety (OHS) regulators for the purpose of licensing.

Pre-requisite Unit

Not applicable.

Competency Field

LIC – Licensing

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Plan work

- 1.1 Potential workplace hazards are identified
- 1.2 Risk control measures are identified consistent with regulatory requirements and the hierarchy of control
- 1.3 Appropriate forklift truck is selected in accordance with load and workplace conditions
- 1.4 Working area is inspected to determine appropriate paths for moving loads and forklift truck in accordance with workplace conditions
- 1.5 Methods for communicating are identified and confirmed in accordance with workplace procedures

2 Conduct routine checks

- 2.1 Prior to operation, forklift truck is visually checked for any damage or defects
- 2.2 All signage and labels are checked to ensure they are visible and legible, in accordance with the appropriate standard
- 2.3 All controls are located, identified and confirmed
- 2.4 Pre-start operational checks are carried out in accordance with manufacturer specifications and workplace procedures
- 2.5 Forklift truck is started in accordance with manufacturer specifications and workplace procedures, and is checked for any abnormal noise
- 2.6 Post-start operational checks are carried out in accordance with manufacturer specifications and workplace procedures

- 2.7 All forklift truck functions and safety devices are tested to their maximum in accordance with manufacturer specifications and workplace procedures
- 2.8 Issues, defects and damage identified during routine checks are reported and recorded in accordance with workplace procedures, and appropriate action is taken

3 Shift load

- 3.1 Weight of load is assessed to ensure compliance with forklift truck data plate specifications
- 3.2 Appropriate hazard prevention/control measures are implemented and communicated to personnel in the work area
- 3.3 Forklift truck is operated at a safe speed in accordance with manufacturer specifications and workplace procedures
- 3.4 Loads are moved and placed to ensure stability of material and avoidance of hazards
- 3.5 Load movement is monitored constantly to ensure safety of personnel and load, and structural stability
- 3.6 Unplanned and/or unsafe situations are responded to in accordance with workplace procedures and emergency plans

4 Shut down and secure forklift truck

- 4.1 Forklift truck is parked to avoid hazards
- 4.2 Forklift truck is shut down in accordance with manufacturer specifications and workplace procedures
- 4.3 Routine post-operational forklift truck checks are carried out in accordance with manufacturer specifications and workplace procedures
- 4.4 Forklift truck is secured to prevent unauthorised access/use
- 4.5 All defects and damage are reported and recorded in accordance with manufacturer specifications and workplace procedures, and appropriate action is taken

Foundation Skills

The language, literacy, numeracy and employment skills that are essential to performance that are not explicit in the unit are listed below.

Skill	Performance feature
Employment skills to:	- operate a forklift truck in different types of workplaces transferring key principles of safe operation to different contexts - improve own performance in safely and efficiently operating a forklift truck by incorporating learnings from different workplaces and different conditions into current performance
Numeracy skills to:	- interpret numerical information including: - selecting appropriate forklift in accordance with load and workplace conditions - load weight assessment, to ensure compliance with forklift truck data plate specifications - controlling and monitoring instrument readings
Language skills to:	- use and interpret vocabulary specific to forklift truck operations and workplace procedures to communicate with other workplace personnel - use non-verbal feedback to support effective communication - use relevant communications conventions
Literacy (reading) skills to:	- interpret documentation that includes technical specificity including: - forklift truck data plate - plant operation manuals and manufacturer specifications - workplace procedures, including emergency plan - workplace signage and labels
Literacy (writing) skills to:	- accurately record and maintain information relating to operating a forklift truck, including: - incident reports - vehicle checking and maintenance records
Self-management skills	- implement risk control measures - initiate emergency management strategies

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit is equivalent to TLILIC2001A Licence to operate a forklift truck

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLILIC2001 Licence to operate a forklift truck

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

A person who demonstrates competency in this unit must provide evidence of safely operating a forklift truck and satisfy all of the unit elements, performance criteria and foundations skills requirements on at least one occasion including:

- applying risk assessment and hazard control strategies, including hierarchy of control as applied to safely operating a forklift truck
- carrying out post-start operational checks, which must ensure:
 - attachment movements and control functions are smooth and comply with operating requirements
 - hazard warning systems (e.g. lights and horns) are functional
 - safety devices are checked, including
 - deadman's switch
 - emergency descent device (hydraulic)
 - reversing beepers
 - start-up is in accordance with procedures
 - steering, transmission and brake functions comply with operating requirements
- carrying out pre-start operational checks, which must include:
 - battery charge checks, as required
 - ensuring availability of logbook, records, handbook and/or operating manuals
 - fitting and interpreting forklift truck data plate
 - fluid checks
 - forklift truck attachment security checks
 - identifying approved modifications and/or attachments fitted, to manufacturer specifications in accordance with forklift truck or attachment data plate
 - locating, identifying and confirming all controls
 - safety equipment checks
 - signage and label visibility and legibility checks
 - updating records as required
- communicating with other workplace personnel through
 - using appropriate worksite protocols

- listening
- making and interpreting hand signals
- questioning to confirm understanding
- signage
- verbal and non-verbal language
- written instructions
- complying with Commonwealth, state and territory work health and safety (WHS)/occupational health and safety (OHS) legislation and regulations
- conducting and monitoring safe forklift truck operations that include moving loads safely, driving and manoeuvring, picking up and placing loads at various stack heights and carrying out all functions to the maximum height and load capacity
- driving a forklift truck with load in forward and reverse, while maintaining visibility
- planning and preparing for forklift truck operations including:
 - conducting a workplace risk assessment
 - identifying hazards associated with operating a forklift truck, which must include
 - forklift truck instability (e.g. due to overloading, poor load placement, irregular loads)
 - ground conditions (e.g. condition of pavement, slopes)
 - insufficient lighting
 - overhead hazards (e.g. electric lines, service pipes)
 - traffic (e.g. pedestrians, vehicles, other plant) and the risk of collision with people, moving plant and fixed structures
 - weather conditions (e.g. wind, lightning, rain)
 - selecting hazard prevention strategies in accordance with the hierarchy of control
 - putting in place effective controls for identified hazards
 - visually checking a forklift truck for any damage or defects prior to operation including
 - evidence of damage
 - leaks
 - structural weaknesses (including paint separation or stressed welds)
- receiving and interpreting workplace instructions, safety information and emergency procedures
- shutting down a forklift truck in accordance with manufacturer specifications and workplace procedures including
 - parking in a suitable location away from dangerous areas
 - correctly positioning fork arms (tips down, tilted forward, lowered to ground)
 - selecting appropriate transmission/gear for parking (relevant to transmission type)
 - applying hand/parking brake
 - turning off engine power
 - removing ignition key as required
 - shutting off LPG gas cylinder valve as required

- securing equipment in accordance with manufacturer specifications and against unauthorised operation
- securing site
- ensuring access ways are clear
- identifying and segregating defective equipment and reporting to authorised personnel
- connecting batteries to charger as required
- verifying problems and equipment faults, and implementing appropriate response procedures to unplanned and/or unsafe situations including
 - environmental conditions (e.g. wind, lightning, storms)
 - failure/loss of control (e.g. brakes and steering)
 - failure of equipment (e.g. hydraulic system)
 - forklift truck instability (e.g. due to deterioration of ground condition, overloading, poor load placement, irregular loads).

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian and industry standards relevant to operating a forklift truck
- Commonwealth, state or territory WHS/OHS legislation and approved codes of practice in relation to one's own responsibilities
- forklift truck characteristics and capabilities (including use of load data plates)
- forklift truck operations and safe operating techniques
- hierarchy of control:
 - elimination
 - substitution
 - isolation
 - engineering controls
 - administrative controls
 - personal protective equipment (PPE)
- methodology to determine weight of a load including the estimation or determination from labels, markings or load paperwork such as:
 - control labels
 - forklift data plates/labels
 - forklift warning decals
- organisational and workplace standards, requirements, policies and procedures for operating a forklift truck
- procedures for recording, reporting and maintaining workplace records and information
- relevant Australian and industry standards, codes of practice and guidelines to safely

operate a forklift truck

- risk control measures including:
 - barricades and traffic control (e.g. traffic management plan)
 - compliance with permit condition requirements from electrical supply authority, including
 - adequate illumination
 - disconnected power
 - excavation safeguards
 - insulated electric lines
 - maintaining safety observer zone
 - movement of obstructions
 - observing limits of approach
 - pedestrian control (barricades, signs, etc.)
 - power disconnection or compliance with electrical supply authority requirements
 - safety tags on electrical switches/isolators
 - using safety observer inside exclusion zone
 - using personal protective equipment
- selecting forklift truck to suit load and workplace conditions
- typical routine problems encountered operating a forklift truck and equipment, and adjustments required for correction.

Assessment Conditions

Assessments must be conducted by an assessor accredited for this high risk work (HRW) licence class in the Commonwealth/state/territory where the licence will be obtained (i.e. an assessor authorised by a Commonwealth/state/territory WHS/OHS regulator).

As a minimum, assessors must satisfy applicable regulatory requirements, which may include requirements in the Standards for *Registered Training Organisations* current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and all assessment must be conducted in the English language.

Assessment of performance must be undertaken in the workplace and/or under realistic workplace conditions which typically reflect:

- performing tasks/activities within timelines that would be expected in a workplace
- standard and authorised work practices, safety requirements and environmental constraints
- using full-scale equipment

Forklift truck operation assessment must be conducted in a working zone in accordance with state/territory arrangements.

If the working zone is located at a 'live' site, assessment should continue in all weather conditions unless the safety of the candidate or others could be compromised.

Simulators must **not** be used in the assessment of this unit of competency.

Accredited assessors are responsible for ensuring that candidates have access to:

- a suitable forklift truck that complies with AS 2359 Powered industrial trucks and is in a safe condition
- associated equipment appropriate to forklift truck operations
- suitable loads
- required personal protective equipment (PPE) for the purpose of Performance Assessment
- relevant workplace procedures and standards for operating a forklift truck, including:
 - approved codes of practice and guidance
 - relevant Australian and international technical standards
 - manufacturer guidelines (instructions, specifications or checklists) for the purpose of Performance Assessment
 - relevant industry standards and operating procedures (where applicable)
 - safe work method statements (SWMS), as required.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

FBP Food, Beverage and Pharmaceutical

Modification History

Not applicable.

Credit Arrangements

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

FBPSS00001 Advanced baking skill set

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Description

This skill set addresses the skills required to provide bakers with advanced knowledge and skills to produce baking products.

Pathways Information

These units of competency provide a pathway from FBP30417 Certificate III in Bread Baking and FBP30517 Certificate III in Baking. Three of the units provide credit toward FBP40217 Certificate IV in Baking.

Licensing/Regulatory Information

Food safety legislation applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users of this skill set are advised to check with their food safety authority for specific requirements.

Skill Set Requirements

- FBPRBK3005 Produce basic bread products
- FBPRBK3018 Produce basic artisan products
- FBPRBK4001 Produce artisan bread products*
- FBPRBK4002 Develop advanced artisan bread methods**

* Individuals must achieve competency in FBPRBK3005 Produce basic bread products prior to assessment of FBPRBK4001 Produce artisan bread products.

** Individuals must achieve competency in FBPRBK4001 Produce artisan bread products prior to assessment of FDFRB4002 Develop advanced artisan bread methods.

Target Group

This skill set is for experienced bakers working in a commercial baking environment.

Suggested words for Statement of Attainment

These competencies from the FBP Food, Beverage and Pharmaceutical Training Package meet industry requirements for producing advanced bakery products in a commercial baking environment.

FBPSS00002 Bread baking for pastry cooks skill set

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Description

This skill set addresses the skills required to provide pastry cooks with the knowledge and skills to bake bread products.

Pathways Information

These units of competency provide a pathway from the FBP30317 Certificate III in Cake and Pastry or equivalent.

Licensing/Regulatory Information

Food safety legislation applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users of this skill set are advised to check with their food safety authority for specific requirements.

Skill Set Requirements

- FBPRBK3005 Produce basic bread products
- FBPRBK3006 Produce savoury bread products
- FBPRBK3007 Produce specialty flour bread products
- FBPRBK3014 Produce sweet yeast products
- FBPRBK4001 Produce artisan bread products*

* Individuals must achieve competency in FBPRBK3005 Produce basic bread products prior to assessment of FBPRBK4001 Produce artisan bread products.

Target Group

This skill set targets experienced pastry cooks who require the skills and knowledge to bake bread products in a commercial baking environment.

Suggested words for Statement of Attainment

These competencies from the FBP Food, Beverage and Pharmaceutical Training Package meet industry requirements for baking bread products in commercial bakeries.

FBPSS00003 Cake and pastry baking for bread bakers skill set

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 1.0.

Description

This skill set addresses the skills required to provide bread bakers with the knowledge and skills to bake cake and pastry products.

Pathways Information

These units of competency provide a pathway for individuals who hold the FBP30417 Certificate III in Bread Baking or equivalent.

Licensing/Regulatory Information

Food safety legislation applies to workers in this industry. Requirements vary between industry sectors and state/territory jurisdictions. Users of this skill set are advised to check with their food safety authority for specific requirements.

Skill Set Requirements

- FBPRBK3001 Produce laminated pastry products
- FBPRBK3002 Produce non laminated pastry products
- FBPRBK3008 Produce sponge cake products
- FBPRBK3009 Produce biscuit and cookie products
- FBPRBK3010 Produce cake and pudding products
- FBPRBK3018 Produce basic artisan products

Target Group

This skill set targets experienced bread bakers who require the skills and knowledge to bake cake and pastry products in a commercial baking environment.

Suggested words for Statement of Attainment

These competencies from the FBP Food, Beverage and Pharmaceutical Training Package meet industry requirements for cake and pastry products in commercial bakeries.