



**AUSTRALIAN
NATIONAL TRAINING
AUTHORITY**

Food Processing Industry

FDF 98

Aerated Waters Competency Units

**NATIONAL FOOD INDUSTRY
TRAINING COUNCIL**

Qualification	Code
Certificate III in Food Processing	FDF30198
Certificate II in Food Processing	FDF20198
Certificate I in Food Processing	FDF10198

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Locate industry and company products and processes (aerated waters)

FDF AWDC1 A	Locate industry and company products and processes (Aerated Waters)
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Descriptor This is a specialist unit that has been customised for the aerated waters sector. It covers the products and processes used in their workplace.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Processes and procedures are carried out within company policy and procedures and legislative requirements
- Aerated waters processes typically include syrup preparation, water treatment, heat treatment product preparation, container filling, post-mix packaging, outer packaging and warehousing
- Stages refer to functions or activities in the production, packaging and despatch processes. Examples of typical stages are mixing, blending, heating, processing, container washing, container filling, packing, storing and despatching.

Element	Performance criteria	Evidence guide – Part A
Identify products and quality products	Company product range is identified Quality requirements of final products are identified in accord with company standards	Part A of the Evidence guide identifies the knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. It should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> - access workplace information to identify materials and production requirements - identify and locate materials used in the work process - identify and locate production and/or packaging stages and processes in the workplace - comply with OHS and food safety requirements when moving around the workplace
Identify and locate production and packaging processes	Raw materials and related handling systems are located and operated as required Production and packaging stages and processes are identified Equipment used for each stage is located	Underpinning knowledge: <ul style="list-style-type: none"> - range of final products produced by the company - basic understanding of brand image, company goals and philosophy - quality requirements/specifications for final products - consequences of product failing to meet quality requirements - stages and processes used to manufacture product - basic purpose of equipment used at each stage (cont.)

– Element	– Performance criteria	– Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> – outputs at each stage of the process – raw materials/consumables used – preparation, packaging, handling and storage of finished product prior to sale – OHS, quality, food safety and environmental requirements relating to own work

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry’s endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry’s core competencies for the particular AQF level.

Assessment context

Assessment must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to describe aerated waters products and processes given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production systems, stages and processes
- raw materials, in-process and finished product requirements and/or specifications

Relationship to other units

Co-requisites:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Relationship to learning resources

Main learning resources:

- Introduction to beverage manufacture

Related learning resources:

- Industrial Communication A
- Calculations A
- Occupational Health and Safety A
- Quality Assurance A
- Food Safety A (Hygiene and Sanitation A)

Locate industry and company products and processes (aerated waters)

Descriptor This is a specialist unit that applies to the aerated waters sector of the food processing industry. It includes the preparation and operation of a transfer process.

Range of variables

This range of variables provides further advice to interpret the scope and context this unit of competence. It assumes that:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information can include Standard Operating Procedures (SOPs), packaging or production schedules
- Equipment may include manual forklifts, or pallet jacks, conveyors, hydraulic lifts or suction cups, and cappers
- Systems can be manual, semi automatic or automatic.
- Materials may include consumables (caps, lids, labels, glue), containers (cans, bottles, cartons or pouches), outer packaging materials (cartons, crates or trays) and product
- Services may include power, vacuum, compressed air, instrumentation, refrigeration, on line lubricants, nitrogen and carbon dioxide
- Information systems may be print or screen based
- Work is typically conducted in a production environment

Element	Performance criteria	Evidence guide – Part A
Perpare to transfer materials	<p>Demand for materials is determined</p> <p>Materials are confirmed and available to meet production requirements</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – access workplace information to identify production or packaging material requirements – select, fit and use personal/protective clothing and /or equipment
Transfer materials	<p>Materials are transferred and loaded (as required) onto production/packaging line to specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of specification materials or process is reported</p> <p>Waste is monitored and cleared according to company procedures</p>	<ul style="list-style-type: none"> – confirm supply of necessary materials and services. This may involve determining both type, quality and quantity of material required – liaise with other work ares – prepare materials for transfer as required – confirm equipment status and condition. This may include ensuring equipment is cleaned to specification prior to operation. – pace work to meet production/packaging requirements – complete relevant workplace records as required

– Element	– Performance criteria	– Evidence guide – Part A
Shut down transfer process	<p>The transfer process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> – transfer materials to meet demand – load materials onto packaging/production lines (as required) – monitor transfer process to identify out-of-specification materials or process – sort and collect waste for disposal – maintain work area to meet housekeeping standards
Record Information	Workplace information is recorded in the appropriate format.	<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – materials used in production/packaging processes – procedure for verifying materials – procedures for determining quantity of materials required – procedures for ordering, accessing and transferring materials – procedures for loading materials into production/packaging process (as required) – procedures and responsibilities for reporting problems – OHS hazards and controls, including manual handling – Environmental aspects, impacts and controls – housekeeping requirements – waste types, collection and disposal requirements – consequences of incorrect waste disposal – recording requirements and procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to transfer materials to production/packaging lines:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production/packaging specifications and schedules
- materials to be transferred
- materials transfer equipment
- record keeping system

Relationship to other units

Co-requisites:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Related Units:

- Use manual handling equipment
- Shift materials safely

Relationship to learning resources

Main learning resource:

- Materials Transfer

Related learning resources

- Materials Handling A
- Industrial Communication A
- Calculations A
- Occupational Health and Safety A
- Quality Assurance A
- Food Safety A (Hygiene and Sanitation A)

Descriptor This is a specialist unit that applies to the aerated waters sector of the food processing industry. It covers the process used to manually load of pallet.

Range of variables

This range of variables provides further advice to interpret the scope and context this unit of competence. It assumes that:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Work is typically conducted in a packing work area
- Workplace information can include Standard Operating Procedures (SOPs) and packaging specifications and schedules
- Equipment may include pallets, manual forklifts or pallet jacks, loading aids, and equipment used for securing pallet loads
- Materials may include product to be palletised, pallets and consumables used in the palletising process. Product will generally be presented in cartons, trays or crates.
- Services may include power.
- Information systems may be print or screen based.
- Process will involve manual handling techniques

Element	Performance criteria	Evidence guide – Part A
Prepare for loading pallets	Type and quantity of product to be palletised is confirmed Pallets are transferred to packing area Materials and equipment for securing pallet load are confirmed and available to meet palletising requirements	Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> - access workplace information to identify palletising requirements. - Confirm supply of necessary materials. This may involve checking both the quantity and quality of the product to be palletised as well as materials used in securing pallet load.
Manually load pallets	Product is stacked and secured on pallets according to specification	<ul style="list-style-type: none"> - determine number, type and size of pallets required - monitor quality of packaging to identify out-of-specification results (labelling, coding, pack damage) - stack pallet according ensuring pallet formation and pattern match customer and distribution requirements <p>(cont)</p>

Element	Performance criteria	Evidence guide – Part A
		<ul style="list-style-type: none"> – monitor manual palletising process and equipment operation to identify out-of specification results or non-compliance. This can involve monitoring: <ul style="list-style-type: none"> ➢ stack formation ➢ stack size – pace work to meet production requirements – complete relevant workplace records as required – sort and collect waste for disposal – maintain work area to meet housekeeping standards – record workplace information <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – procedures for moving loaded and unloaded pallets – link to related processes – procedures for determining quantity of materials required – procedures for ordering materials – quality characteristics of product to be palletised – quality characteristics of palletised and secured product – pallet stacking and formation procedures – consequences of incorrect procedures or pallet load configuration – OHS hazards and controls, including manual handling – pallet identification and management system where relevant – housekeeping requirements – waste types, collection and disposal requirements – recording requirements and procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry’s endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.

- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to manually load pallets given:

- work procedures including advice on safe work practices and food safety requirements
- production/packaging specifications and pallet loading procedures
- materials and consumables
- product to be palletised
- related equipment as required
- record keeping system

Relationship to other units

Co-requisites:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Related Units:

- Use manual handling equipment
- Shift materials safely

Relationship to learning resources

Main learning resource:

- Pallet Loading (manual)

Related learning resources

- Materials Handling A
- Industrial Communication A
- Calculations A
- Occupational Health and Safety A
- Quality Assurance A
- Food Safety A (Hygiene and Sanitation A)

Descriptor

This is a specialist unit that applies to the aerated waters sector of the food processing industry. It covers the preparation and operation of a single automated outer packaging process.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information can include Standard Operating Procedures (SOPs), specifications, production and packaging schedules
- Equipment may include outer packaging, conveying systems, sensors, coding, dispensers, hot melt glue equipment and process control units
- A single automated outer packaging process may involve packaging product into either multipacks, cartons, trays or shrink/stretch wrapping product
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational. It may also involve checking operation/calibration of measuring instrumentation
- Materials may include packaging consumables, and product to be packed. Product to be packed into secondary packaging may include bottles, cartons or pouches. Individual units of product may be packed into multi packs prior to packaging into cartons, trays or shrink/stretch wrapping. Mutli pack types vary and may be cardboard, shrink or stretch wrap or plastic collars.
- Services may include power, vacuum and compressed and instrumentation air
- Monitoring the process may involve the use of production data such as performance control charts
- Process operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process that must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based
- Work may involve exposure to chemicals/solvents, fumes, hot glue, broken glass and other hazardous substances

Element	Performance criteria	Evidence guide – Part A
Prepare the outer packaging process for operation	<p>Materials are confirmed and available to meet production/recipe requirements</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The outer packaging process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> - Access workplace information to identify production requirements - Select, fit and use personal protective clothing and/or equipment <p><i>(cont.)</i></p>

– Element	– Performance criteria	– Evidence guide – Part A
Operate and monitor the outer packaging process	<p>The outer packaging process is started up according to company procedures</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>Packaged product meets specifications</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – Confirm supply of necessary materials and services. This may involve checking both the quantity and quality of product and consumables to be used in the outer packaging process – Liaise with other work areas – Prepare materials as required – Confirm equipment status and condition. This may include ensuring equipment is cleaned to specification. – 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: <ul style="list-style-type: none"> ➤ size settings ➤ temperature settings ➤ tension settings of shrink/stretch wrap ➤ sealing and coding process ➤ sensor operation ➤ level of consumables
Shut down the outer packaging process	<p>The outer packaging process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> – monitor supply and flow of materials to and from the process – take corrective action in response to out-of-specification results or non-compliance – conduct product/batch changeovers – report and/or record corrective action as required
Record information	<p>Workplace information is recorded in the appropriate format</p>	<ul style="list-style-type: none"> – sort, collect, treat, recycle or dispose of waste – shut down equipment in response to an emergency situation – shut down equipment in response to routine shut down requirements – prepare equipment for cleaning – record workplace information – maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> – clean and sanitise equipment – take samples and conduct test – carry out routine maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and basic principles of outer packaging – link to related processes – procedures for determining quantity of consumables required <p><i>(cont.)</i></p>

– Element	– Performance criteria	– Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> – procedures for ordering consumables – set up procedures – quality characteristics of product prior to and after outer packaging – coding purpose and requirements – process specifications, procedures and operating parameters – equipment and instrumentation components, purpose and operation – basic operating principles of process control systems where relevant – services used – significance and method of monitoring control points within the process – common causes of variation and corrective action required – OHS hazards and controls in particular as relates to the handling of: <ul style="list-style-type: none"> ➢ Solvents/chemicals, fumes ➢ Hot glue ➢ Broken glass ➢ Pressurised air – Lock out and tag out procedures – Procedures and responsibility for reporting problems – Shut down and cleaning requirements associated with types of shut downs – Waste handling requirements and procedures – Recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> – Cleaning and sanitation procedures – Sampling and testing procedures – Routine maintenance procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.

- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate an automated outer packaging process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production/packaging schedule, and instructions
- material safety data sheets where appropriate
- packaging specifications, control points and processing parameters
- automated outer packaging equipment
- services
- product and consumables for packaging
- related work areas and communication system
- sampling and testing schedules as required
- relevant OHS clothing and equipment
- routine preventative maintenance schedule as required
- cleaning schedule as required
- documentation and recording requirements and procedures

Relationship to other units

Co-requisites:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices

Related Units:

- Shift materials safely

Relationship to learning resources

Main learning resource:

- Outer Packaging 1

Related learning resources

- Materials Handling A
- Industrial Communication A
- Calculations A
- Occupational Health and Safety A
- Quality Assurance A
- Food Safety A (Hygiene and Sanitation A)

FD F AWBF2 A
Operate a beverage filling process

Descriptor This is a specialist unit that has been developed for the aerated waters sector. It involves preparing, operating, monitoring and shutting down the beverage filling process within quality requirements and standard operating procedures.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial arrangements
- Workplace information can include Standard Operating Procedures (SOPs), specifications and production schedules
- Beverage filling equipment may include fillers, mixers, blenders, carbonators, valves, raisers, conveyors, seamers, level detection devices
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational
- Product used in beverage filling may include syrup, water, carbon dioxide
- Materials used in beverage filling may include bottles, cans, containers, caps, bladders, can ends, 'tetrapak'
- Services may include power, water, steam, air
- Monitoring the process may involve the use of production data such as performance control charts
- Process operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) quality and regulatory control points as well as inspection points
- Information systems may be print or screen based

Element	Performance criteria	Evidence guide – Part A
Prepare the beverage filling process for operation	Materials are confirmed and available to meet production requirements Services are confirmed as being ready for operation Equipment is checked to confirm readiness for use The beverage filling process is set to meet production requirements	Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B outlines how this guide is to be applied. It should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> ➤ access workplace information to identify production requirements for the beverage filling process ➤ select, fit and use personal protective clothing and equipment ➤ interpret the production schedule ➤ confirm supply of necessary materials and services to the beverage filling process ➤ confirm equipment status and condition ➤ set up and start up the process. This can involve the use of process control systems (<i>cont.</i>)

– Element	– Performance criteria	– Evidence guide –Part A
Operate and monitor the beverage filling process	<p>The beverage filling process is started up according to company specifications</p> <p>Control points are monitored to confirm that performance is maintained within specification</p> <p>Beverage containers meet specifications</p> <p>Equipment is monitored to confirm operating condition</p> <p>Stock flow to and from beverage filling process is maintained within production requirements</p> <p>Out-of-specification product, process, equipment performance is identified, rectified and/or reported</p> <p>Size/product changeover is completed in accordance with batch instructions and standard operating procedures</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> ➤ monitor the beverage filling process and equipment operation to identify out-of-specification results or non-compliance. This could include: <ul style="list-style-type: none"> ➤ flow rates/quantity ➤ leaking containers ➤ contaminated product ➤ materials faults ➤ equipment faults ➤ services faults ➤ monitor supply and flow of materials to and from the beverage filling process ➤ take corrective action in response to out-of-specification results or non-compliance ➤ report and/or record corrective action as required ➤ replenish the filling process with raw materials, ingredients and packaging consumables ➤ verify that output meets specifications ➤ implement size/product changeovers ➤ sort, collect, treat, recycle or dispose of waste ➤ shut down beverage filling equipment in response to emergency situation ➤ shut down beverage filling equipment in response to routine shutdown requirements ➤ prepare beverage filling equipment for cleaning ➤ maintain work area to meet housekeeping standards ➤ record workplace information <p>May include the ability to:</p> <ul style="list-style-type: none"> ➤ clean and sanitise equipment ➤ take samples and conduct tests ➤ carry out routine maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> ➤ purpose and basic principles of the beverage filling process ➤ relationship between the beverage filling process and other aerated water processes ➤ stages and changes which occur during beverage filling ➤ requirements of the beverage filling process ➤ types of fillers ➤ aseptic requirements for preparing containers ➤ microbiological considerations in filling and packaging aerated water products ➤ effect of beverage filling process on the end product ➤ quality characteristics to be achieved (<i>cont.</i>)
Shut down the beverage filling process	<p>Beverage filling process is shut down according to company procedures</p> <p>Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures</p>	<p>May include the ability to:</p> <ul style="list-style-type: none"> ➤ clean and sanitise equipment ➤ take samples and conduct tests ➤ carry out routine maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> ➤ purpose and basic principles of the beverage filling process ➤ relationship between the beverage filling process and other aerated water processes ➤ stages and changes which occur during beverage filling ➤ requirements of the beverage filling process ➤ types of fillers ➤ aseptic requirements for preparing containers ➤ microbiological considerations in filling and packaging aerated water products ➤ effect of beverage filling process on the end product ➤ quality characteristics to be achieved (<i>cont.</i>)
Recording information	Workplace information is recorded in the appropriate format	<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> ➤ purpose and basic principles of the beverage filling process ➤ relationship between the beverage filling process and other aerated water processes ➤ stages and changes which occur during beverage filling ➤ requirements of the beverage filling process ➤ types of fillers ➤ aseptic requirements for preparing containers ➤ microbiological considerations in filling and packaging aerated water products ➤ effect of beverage filling process on the end product ➤ quality characteristics to be achieved (<i>cont.</i>)

– Element	– Performance criteria	– Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> ➤ 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 ➤ services used in beverage filling process ➤ common causes of variation and corrective action required ➤ OHS hazards and controls ➤ lock out and tag out procedures ➤ procedures and responsibility for reporting problems ➤ environmental issues and controls ➤ shutdown and cleaning requirements associated with changeovers and types of shutdowns ➤ waste handling requirements and procedures ➤ recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> ➤ cleaning and sanitation procedures ➤ sampling and testing procedures ➤ routine maintenance procedures

Evidence guide - Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate a beverage filling process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production schedule, batch instructions
- material data safety sheets where appropriate
- specifications, control points and processing parameters
- beverage filling equipment
- services as required
- stock required for the beverage filling process
- stock flow system
- related work areas and communication system
- relevant OHS clothing and equipment
- routine preventative maintenance schedule as required
- cleaning schedule as required
- sampling and testing schedules as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites (or equivalent):

- Apply basic food safety practices
- Apply basic mathematical concepts
- Apply basic quality assurance practices
- Apply safe work procedures
- Communicate in the workplace

Co-requisites:

- Implement occupational health and safety principles and procedures
- Collect, present and apply workplace information
- Implement the food safety plan
- Implement the quality system

Related units:

- Clean and sanitise equipment
- Apply sampling techniques
- Conduct routine tests
- Conduct routine preventative maintenance

Where related units form an integral part of operating a beverage filling process in the workplace, these units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Beverage Processing

Related learning resources:

- Cleaning and Sanitation
- Food Safety B (Hygiene and Sanitation B and C)

Operate a beverage filling process

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B

Descriptor This is a specialist unit that has been developed for the aerated waters sector. It involves preparing, operating, monitoring and shutting down the syrup production process within quality requirements and standard operating procedures.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial arrangements
- Workplace information can include Standard Operating Procedures (SOPs), specifications and production schedules
- The syrup production process involves measuring ingredients, mixing, transferring and checking final product
- Syrup production equipment may include air compressors, boilers, mixing, blending, cleaning equipment, equipment accessories, tanks, transfer systems, valves, pumps, heat exchangers, valves, tanks, water treatment systems
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational
- Product used in syrup production may include syrup preparation ingredients, water, sugar
- Services may include power, water, steam, air
- Monitoring the process may involve the use of production data such as performance control charts
- Process operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) quality and regulatory control points as well as inspection points
- Information systems may be print or screen based

Element	Performance criteria	Evidence guide – Part A
Prepare the syrup production process for operation	Materials are confirmed and available to meet production requirements Services are confirmed as being ready for operation Equipment is checked to confirm readiness for use The syrup production process is set to meet production requirements	Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B outlines how this guide is to be applied. It should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> ➤ access workplace information to identify production requirements for the syrup production process ➤ select, fit and use personal protective clothing and equipment ➤ interpret the production schedule to determine the order type and range of syrup mixes to be produced ➤ confirm supply of necessary materials and services to the syrup production process <i>(cont.)</i>

– Element	– Performance criteria	– Evidence guide – Part A
Operate and monitor the syrup production process	<p>The syrup production process is started up according to company specifications</p> <p>Control points are monitored to confirm that performance is maintained within specification</p> <p>Syrup meets specifications</p> <p>Equipment is monitored to confirm operating condition</p> <p>Stock flow to and from syrup production process is maintained within production requirements</p> <p>Out-of-specification product, process, equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> ➤ confirm equipment status and condition ➤ set up and start up the process. This can involve the use of process control systems ➤ monitor the syrup production process and equipment operation to identify out-of-specification results or non-compliance. This may include: <ul style="list-style-type: none"> ➤ stock flow/quantity ➤ time/temperature ➤ contamination ➤ materials faults ➤ equipment faults ➤ services faults ➤ monitor supply and flow of materials to and from the syrup production process ➤ transfer syrup to designated location ➤ take corrective action in response to out-of-specification results or non-compliance ➤ report and/or record corrective action as required ➤ replenish the syrup production process with raw materials, ingredients and packaging consumables
Shut down the syrup production process	<p>Syrup production process is shut down according company procedures</p> <p>Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> ➤ implement instructions for base ingredient preparation and handling base ingredients after processing ➤ verify that output meets specifications ➤ sort, collect, treat, recycle or dispose of waste ➤ shut down syrup production equipment in response to emergency situation ➤ shut down syrup production equipment in response to routine shutdown requirements
Recording information	Workplace information is recorded in the appropriate format	<ul style="list-style-type: none"> ➤ prepare syrup production equipment for cleaning ➤ maintain work area to meet housekeeping standards ➤ complete batch reconciliations ➤ record workplace information <p>May include the ability to:</p> <ul style="list-style-type: none"> ➤ clean and sanitise equipment ➤ take samples and conduct tests ➤ carry out routine maintenance (<i>cont.</i>)

– Element	– Performance criteria	– Evidence guide – Part A
		<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> ➤ purpose and basic principles of the syrup production process ➤ relationship between the syrup production process and other aerated water processes ➤ stages and changes which occur during syrup production ➤ requirements of the syrup production process ➤ purpose of base ingredients and the preparation procedure ➤ procedures for blending wet materials and dry materials ➤ microbiological considerations in the syrup production process ➤ effect of syrup production process on the end product ➤ purpose and use of material safety data sheets ➤ procedures for handling dangerous goods ➤ quality characteristics to be achieved ➤ process specifications, procedures and operating parameters ➤ significance and methods of monitoring control points within the syrup production process ➤ equipment and instrumentation components, purpose and operation ➤ services used in syrup production process ➤ common causes of variation and corrective action required ➤ OHS hazards and controls ➤ lock out and tag out procedures ➤ procedures and responsibility for reporting problems ➤ environmental issues and controls ➤ shutdown and cleaning requirements associated with changeovers and types of shutdowns ➤ waste handling requirements and procedures ➤ recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> ➤ cleaning and sanitation procedures ➤ sampling and testing procedures ➤ routine maintenance procedures

Evidence guide - Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate a syrup production process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production schedule, batch/recipe instructions
- material data safety sheets where appropriate
- specifications, control points and processing parameters
- syrup production equipment
- services as required
- stock required for the syrup production process
- stock flow system
- related work areas and communication system
- relevant OHS clothing and equipment
- routine preventative maintenance schedule as required
- cleaning schedule as required
- sampling and in-process testing schedules as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites (or equivalent):

- Apply basic food safety practices
- Apply basic mathematical concepts
- Apply basic quality assurance practices
- Apply safe work procedures
- Communicate in the workplace

Co-requisites:

- Implement occupational health and safety principles and procedures
- Collect, present and apply workplace information
- Implement the food safety plan
- Implement the quality system

Related units:

- Clean and sanitise equipment
- Apply sampling techniques
- Conduct routine tests
- Conduct routine preventative maintenance

Where related units form an integral part of operating a syrup production process in the workplace, these units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Syrup Production

Related learning resources:

- Cleaning and Sanitation
- Food Safety B (Hygiene and Sanitation B and C)
- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B

Descriptor This is a specialist unit that has been developed for the aerated waters sector. It involves preparing, operating and maintaining the water treatment process to produce potable water to quality requirements and standard operating procedures.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial arrangements
- Workplace information can include Standard Operating Procedures (SOPs), specifications and production schedules
- Water treatment equipment may include dosing, storage, valves, filters
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational
- Materials used in water treatment may include chlorine, alum, caustic soda
- Services may include power, water, air
- Monitoring the process may involve the use of production data such as performance control charts
- Process operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) quality and regulatory control points as well as inspection points
- Information systems may be print or screen based

Element	Performance criteria	Evidence guide – Part A
Prepare the water treatment process for operation	<p>Materials are confirmed and available to meet production requirements</p> <p>Services are confirmed as being ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The water treatment process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B outlines how this guide is to be applied. It should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> ➤ access workplace information to identify production requirements for the water treatment process ➤ select, fit and use personal protective clothing and equipment ➤ confirm supply of necessary materials and services to the water treatment process ➤ confirm equipment status and condition ➤ set up and start up the process. This can involve the use of process control systems ➤ monitor the water treatment process and equipment operation to identify out-of-specification results or non-compliance. This may include: <ul style="list-style-type: none"> ➤ flow rates/quantity ➤ materials faults ➤ equipment faults ➤ services faults (cont.)
Operate and monitor the water treatment process	<p>The water treatment process is started up according to company specifications</p> <p>Control points are monitored to confirm that performance is maintained within specification</p>	

– Element	– Performance criteria	– Evidence guide –Part A
Operate and monitor the water treatment process <i>(continued)</i>	<p>Potable water is produced to specifications</p> <p>Equipment is monitored to confirm operating condition</p> <p>Stock flow to and from water treatment process is maintained within production requirements</p> <p>Out-of-specification product, process, equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> ➤ monitor supply and flow of materials to and from the water treatment process ➤ take corrective action in response to out-of-specification results or non-compliance ➤ report and/or record corrective action as required ➤ maintain water treatment supplies at appropriate inventory level ➤ maintain a treatment system free of physical, chemical and biological contaminants ➤ maintain waste and effluent discharges within agreed levels ➤ sort, collect, treat, recycle or dispose of waste ➤ shut down water treatment equipment in response to emergency situation ➤ shut down water treatment equipment in response to routine shutdown requirements ➤ prepare water treatment equipment and plant for cleaning ➤ maintain work area to meet housekeeping standards ➤ record workplace information
Shut down the water treatment process	<p>Water treatment process is shut down according company procedures</p> <p>Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures</p>	<p>May include the ability to:</p> <ul style="list-style-type: none"> ➤ clean and sanitise equipment ➤ take samples and conduct tests ➤ carry out routine maintenance
Recording information	Workplace information is recorded in the appropriate format	<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> ➤ purpose and basic principles of the water treatment process ➤ relationship between the water treatment process and other aerated water processes ➤ stages and changes which occur during water treatment ➤ requirements of the water treatment process ➤ microbiological considerations in the water treatment process ➤ effect of water treatment process on the end product ➤ quality characteristics to be achieved ➤ process specifications, procedures and operating parameters ➤ significance and methods of monitoring control points within the water treatment process ➤ equipment and instrumentation components, purpose and operation ➤ services used in water treatment process ➤ common causes of variation and corrective action required <i>(cont.)</i>

– Element	– Performance criteria	– Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> ➤ OHS hazards and controls ➤ lock out and tag out procedures ➤ procedures and responsibility for reporting problems ➤ environmental issues and controls ➤ shutdown and cleaning requirements associated with types of shutdowns ➤ waste handling requirements and procedures ➤ recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> ➤ cleaning and sanitation procedures ➤ sampling and testing procedures ➤ routine maintenance procedures

Evidence guide - Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate a water treatment process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production schedule, batch instructions
- material data safety sheets where appropriate
- specifications, control points and processing parameters
- water treatment equipment
- services as required
- stock required for the water treatment process

- stock flow system
- related work areas and communication system
- relevant OHS clothing and equipment
- routine preventative maintenance schedule as required
- cleaning schedule as required
- sampling and in-process testing schedules as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites (or equivalent):

- Apply basic food safety practices
- Apply basic mathematical concepts
- Apply basic quality assurance practices
- Apply safe work procedures
- Communicate in the workplace

Co-requisites:

- Implement occupational health and safety principles and procedures
- Collect, present and apply workplace information
- Implement the food safety plan
- Implement the quality system

Related units:

- Clean and sanitise equipment
- Apply sampling techniques
- Conduct routine tests
- Conduct routine preventative maintenance

Where related units form an integral part of operating a water treatment process in the workplace, these units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Water Treatment

Related learning resources:

- Cleaning and Sanitation
- Food Safety B (Hygiene and Sanitation B and C)
- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B

Descriptor This is a specialist unit that has been developed for the aerated waters sector. It involves preparing, operating, monitoring and shutting down the post-mix packaging process within quality requirements and standard operating procedures.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial arrangements
- Workplace information can include Standard Operating Procedures (SOPs), specifications and production schedules
- Post-mix packaging equipment may include tanks,
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational
- Materials may include raw materials, pre-processed materials, bags, bottles, cans, containers
- Services may include power, water, steam, air
- Monitoring the process may involve the use of production data such as performance control charts
- Process operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) quality and regulatory control points as well as inspection points
- Information systems may be print or screen based

Element	Performance criteria	Evidence guide – Part A
<p>Prepare the post-mix packaging process for operation</p>	<p>Materials is confirmed and available to meet production requirements</p> <p>Services are confirmed as being ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The post-mix packaging process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B outlines how this guide is to be applied. It should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> ➤ access workplace information to identify production requirements for the post-mix packaging process ➤ select, fit and use personal protective clothing and equipment ➤ confirm supply of necessary materials and services to the post-mix packaging process ➤ confirm equipment status and condition ➤ set up and start up the process. This can involve the use of process control systems ➤ monitor the post-mix packaging process and equipment operation to identify out-of-specification results or non-compliance. This may include: <i>(cont.)</i>

– Element	– Performance criteria	– Evidence guide – Part A
Operate and monitor the post-mix packaging process	<p>The post-mix packaging process is started up according to company specifications</p> <p>Control points are monitored to confirm that performance is maintained within specification</p> <p>Syrup packaging meets specifications</p> <p>Equipment is monitored to confirm operating condition</p> <p>Stock flow to and from post-mix packaging process is maintained within production requirements</p> <p>Out-of-specification product, process, equipment performance is identified, rectified and/or reported</p> <p>Product changeover is completed in accordance with batch instructions and standard operating procedures</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> ➤ stock flow/quantity ➤ raw and pre-processed materials ➤ labels and codes ➤ packaging quantity/quality ➤ equipment faults ➤ services faults ➤ monitor supply and flow of materials to and from the post-mix packaging process ➤ take corrective action in response to out-of-specification results or non-compliance ➤ report and/or record corrective action as required ➤ replenish the filling process with raw materials, ingredients and packaging consumables ➤ verify that output meets specifications ➤ implement size/product changeovers ➤ transfer product to designated location ➤ sort, collect, treat, recycle or dispose of waste ➤ shut down post-mix packaging equipment in response to emergency situation ➤ shut down post-mix packaging equipment in response to routine shutdown requirements ➤ prepare post-mix packaging equipment for cleaning ➤ maintain work area to meet housekeeping standards ➤ record workplace information
Shut down the post-mix packaging process	<p>Post-mix packaging process is shut down according company procedures</p> <p>Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures</p>	<p>May include the ability to:</p> <ul style="list-style-type: none"> ➤ clean and sanitise equipment ➤ take samples and conduct tests ➤ carry out routine maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> ➤ purpose and basic principles of the post-mix packaging process ➤ relationship between the post-mix packaging process and other aerated water processes ➤ stages and changes which occur during post-mix packaging
Recording information	Workplace information is recorded in the appropriate format	<ul style="list-style-type: none"> ➤ requirements of the post-mix packaging process ➤ effect of post-mix packaging process on the end product ➤ quality characteristics to be achieved ➤ process specifications, procedures and operating parameters ➤ significance and methods of monitoring control points within the post-mix packaging process (<i>cont.</i>)

– Element	– Performance criteria	– Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> ➤ equipment and instrumentation components, purpose and operation ➤ services used in post-mix packaging process ➤ common causes of variation and corrective action required ➤ OHS hazards and controls ➤ lock out and tag out procedures ➤ procedures and responsibility for reporting problems ➤ environmental issues and controls ➤ shutdown and cleaning requirements associated with changeovers and types of shutdowns ➤ waste handling requirements and procedures ➤ recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> ➤ cleaning and sanitation procedures ➤ sampling and testing procedures ➤ routine maintenance procedures

Evidence guide - Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over a specified time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate a post-mix packaging process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production schedule, batch instructions

- material data safety sheets where appropriate
- specifications, control points and processing parameters
- post-mix packaging equipment
- services as required
- materials required for the post-mix packaging process
- stock flow system
- related work areas and communication system
- relevant OHS clothing and equipment
- routine preventative maintenance schedule as required
- cleaning schedule as required
- sampling and in-process testing schedules as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites (or equivalent):

- Apply basic food safety practices
- Apply basic mathematical concepts
- Apply basic quality assurance practices
- Apply safe work procedures
- Communicate in the workplace

Co-requisites:

- Implement occupational health and safety principles and procedures
- Collect, present and apply workplace information
- Implement the food safety plan
- Implement the quality system

Related units:

- Clean and sanitise equipment
- Apply sampling techniques
- Conduct routine tests
- Conduct routine preventative maintenance

Where related units form an integral part of operating a post-mix packaging process in the workplace, these units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Post-Mix Packaging A
- Post-Mix Packaging B

Related learning resources:

- Cleaning and Sanitation
- Food Safety B (Hygiene and Sanitation B and C)
- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B

Descriptor

This is a specialist unit that applies to the aerated waters sector of the food processing industry. It covers the preparation and operation of a labelling process.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information can include Standard Operating Procedures (SOPs), specifications, and labelling standards.
- Labelling equipment may include automated outer packaging equipment, in-feed conveyors, glue application equipment, coding equipment, label dispensers, sensors, brushes and process control units.
- Materials may include product to be labelled (glass or PET bottles), labelling consumables (glue and ink), and labels. Labels types could include paper, laminates of paper with foil, or synthetic polymer labels and can be in the form of patch labels, self-adhesive labels or thermo-sensitive labels.
- Services may include power, fuel, compressed, steam, water air, instrumentation, refrigeration, on line lubricants, nitrogen and carbon dioxide
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational. It may also involve checking operation/calibration of measuring instrumentation and availability of services
- Monitoring the process may involve the use of production data such as performance control charts
- Process set up, operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process that must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
 - Information systems may be print or screen based
- Work may involve exposure to chemicals/solvents, fumes, hot glue, broken glass and other hazardous substances

Element	Performance criteria	Evidence guide – Part A
Prepare the labelling process for operation	Materials are confirmed and available to meet production requirements Services are confirmed as available and ready for operation Equipment is checked to confirm readiness for use The labelling process is set to meet production requirements	Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables. Demonstrated ability to: <ul style="list-style-type: none"> - Access workplace information to identify production requirements - Select, fit and use personal protective clothing and/or equipment - Confirm supply of necessary materials and services. This may involve checking both the quantity and quality of the product to be labelled and the consumables. - Liaise with other work areas (<i>cont.</i>)

– Element	– Performance criteria	– Evidence guide – Part A
Operate and monitor the labelling process	<p>The labelling process is started up according to company procedures</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>Labelled product meets specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p> <p>Waste is monitored and cleared according to company procedures</p>	<ul style="list-style-type: none"> – Prepare materials as required – Confirm equipment status and condition. This may include performing line changeovers for flavour or size changes and ensuring equipment is cleaned to specification – set up and start up the process checking: <ul style="list-style-type: none"> ➤ label adhesion/glue application ➤ label placement and alignment ➤ label type ➤ label drying time ➤ label cutting process – monitor the process and equipment operation to identify out-of-specification results or non-compliance. This can involve monitoring: <ul style="list-style-type: none"> ➤ size settings ➤ label heights and spacings ➤ temperature settings of hot-melt glue pots ➤ label roll tension ➤ bottle coding ➤ level of consumables – monitor supply and flow of materials to and from the process
Shut down the labelling process	<p>The labelling process is shut-down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> – take corrective action in response to out-of-specification results or non-compliance – conduct product/batch changeovers – report and/or record corrective action as required – sort, collect, treat, recycle or dispose of waste – shut down equipment in response to an emergency situation – shut down equipment in response to routine shut

Record information	Workplace information is recorded in the appropriate format	<p>down requirements</p> <ul style="list-style-type: none"> - prepare equipment for cleaning - record workplace information - maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> - clean and sanitise equipment - take samples and conduct test - carry out routine maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> - purpose and basic principles of labelling process - link to related processes - procedures for determining quantity of consumables required - procedures for ordering consumables - set up and change over procedures and sequence - quality characteristics of product prior to, and after labelling - quality characteristics of consumables - main methods used to label product <p><i>(cont)</i></p>
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Element	Performance criteria	Evidence guide – Part A
		<ul style="list-style-type: none"> – process specifications, procedures and operating parameters – equipment and instrumentation components, purpose and operation – basic operating principles of process control systems where relevant – services used – significance and method of monitoring control points within the process – common causes of variation and corrective action required – OHS hazards and controls in particular as relates to the handling of: <ul style="list-style-type: none"> ➢ Solvents/chemicals, fumes ➢ Hot glue ➢ Broken glass ➢ Pressurised air – lock out and tag out procedures – procedures and responsibility for reporting problems – shut down and cleaning requirements associated with changeovers and types of shut downs – waste handling requirements and procedures – recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> – cleaning and sanitation procedures – sampling and testing procedures – routine maintenance procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate a labelling process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- packaging or production schedules
- specifications, control points and processing parameters
- labelling equipment
- services
- materials including product and consumables
- relevant OHS clothing and equipment
- related work areas and communication system
- material safety data sheets where appropriate
- sampling, and testing schedules as required
- routine preventative maintenance schedule as required
- cleaning schedule as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites or equivalent:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices
- Locate industry and company products and processes (Aerated Waters)
- Operate a single automated outer packaging process

Co-requisites:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Related units:

- Conduct routine tests
- Apply sampling techniques
- Clean and sanitise equipment
- Conduct routine preventative maintenance

Where related units are required to operate a drying process in the workplace, units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Labelling

Related learning resources:

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B
- Food Safety B (Hygiene and Sanitation B & C)
- Routine Testing (Fruit and Vegetable)
- Routine Testing (Dairy)
- Routine Sampling (Dairy)
- Cleaning and Sanitation

FDf AWOP2 A**Operate an automated outer packaging process**

Descriptor This is a specialist unit that applies to the aerated waters sector of the food processing industry. It covers the preparation and operation of an automated outer packaging process

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- Workplace information can include Standard Operating Procedures (SOPs), specifications, production and packaging schedules
- Equipment may include automated outer packaging, conveying systems, sensors, coding, dispensers, hot melt glue equipment and process control units
- An automated outer packaging process involves a combination of at least two single packaging processes such as, packaging product into multipacks, cartons, trays or shrink/stretch wrapping product
- Confirming equipment status involves checking that hygiene and sanitation standards are met, all safety guards are in place and equipment is operational. It may also involve checking operation/calibration of measuring instrumentation and availability of services
- Materials may include packaging consumables, and product to be packed. Product to be packed into secondary packaging may include bottles, cartons or pouches. Individual units of product may be packed into multi packs prior to packaging into cartons, trays or shrink/stretch wrapping. Multi pack types vary and may be cardboard, shrink or stretch wrap or plastic collars.
- Services may include power, vacuum and compressed air, instrumentation refrigeration, on line lubricants, nitrogen and carbon dioxide
- Monitoring the process may involve the use of production data such as performance control charts
- Process operation and monitoring functions may be manual or involve the use of a process control system
- Control points refer to those key points in a work process that must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based
- Work may involve exposure to chemicals/solvents, fumes, hot glue, broken glass and other hazardous substances

Element	Performance criteria	Evidence guide – Part A
Prepare the outer packaging process for operation	<p>Materials are confirmed and available to meet production/recipe requirements</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The outer packaging process is set to meet production requirements</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – Access workplace information to identify production requirements – Select, fit and use personal protective clothing and/or equipment <p>(cont.)</p>

Element	Performance criteria	Evidence guide – Part A
Operate and monitor the outer packaging process	<p>The outer packaging process is started up according to company procedures</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>Packaged product meets specifications</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – Confirm supply of necessary materials and services. This may involve checking both the quantity and quality of product and consumables to be used in the outer packaging process – Liaise with other work areas – Prepare materials as required – Confirm equipment status and condition. This may include performing line changeovers and ensuring equipment is cleaned to specification. – set up and start up the process. This may involve conducting trial runs. – monitor the process and equipment operation to identify out-of-specification results or non-compliance. This can involve monitoring: <ul style="list-style-type: none"> ➢ size settings ➢ temperature settings ➢ tension settings of shrink/stretch wrap ➢ sealing and coding process ➢ sensor operation ➢ level of consumables
Shut down the outer packaging process	<p>The outer packaging process is shut down according to company procedures</p> <p>Waste is collected, treated and disposed or recycled according to company procedures</p>	<ul style="list-style-type: none"> – monitor supply and flow of materials to and from the process – take corrective action in response to out-of-specification results or non-compliance – conduct product/batch changeovers – report and/or record corrective action as required
Record information	Workplace information is recorded in the appropriate format	<ul style="list-style-type: none"> – sort, collect, treat, recycle or dispose of waste – shut down equipment in response to an emergency situation – shut down equipment in response to routine shut down requirements – prepare equipment for cleaning – record workplace information – maintain work area to meet housekeeping standards <p>May include the ability to:</p> <ul style="list-style-type: none"> – clean and sanitise equipment – take samples and conduct test – carry out routine maintenance <p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and basic principles of outer packaging – link to related processes – procedures for determining quantity of consumables required <p><i>(cont.)</i></p>

Element	Performance criteria	Evidence guide – Part A
		<p><i>Underpinning knowledge: (continued)</i></p> <ul style="list-style-type: none"> – procedures for ordering consumables – set up and change over procedures – quality characteristics of product prior to and after outer packaging – coding purpose and requirements – process specifications, procedures and operating parameters – equipment and instrumentation components, purpose and operation – basic operating principles of process control systems where relevant – services used – significance and method of monitoring control points within the process – common causes of variation and corrective action required – OHS hazards and controls, in particular as relates to the handling of: <ul style="list-style-type: none"> ➤ Solvents/chemicals, fumes ➤ Hot glue ➤ Broken glass ➤ Pressurised air – lock out and tag out procedures – procedures and responsibility for reporting problems – shut down and cleaning requirements associated with changeovers and types of shut downs – waste handling requirements and procedures – recording requirements and procedures <p>May include:</p> <ul style="list-style-type: none"> – cleaning and sanitation procedures – sampling and testing procedures – routine maintenance procedures

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.

- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to operate an automated outer packaging process given:

- work procedures including advice on safe work practices, food safety and environmental requirements
- production/packaging schedule, and instructions
- material safety data sheets where appropriate
- packaging specifications, control points and processing parameters
- automated outer packaging equipment
- services
- product and consumables for packaging
- related work areas and communication system
- sampling and testing schedules as required
- relevant OHS clothing and equipment
- routine preventative maintenance schedule as required
- cleaning schedule as required
- documentation and recording requirements and procedures

Relationship to other units

Pre-requisites or equivalent:

- Communicate in the workplace
- Apply basic mathematical concepts
- Apply safe work procedures
- Apply basic quality assurance practices
- Apply basic food safety practices
- Locate industry and company products and processes (Aerated Waters)
- Operate a single automated outer packaging process

Co-requisites:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Related units:

- Conduct routine tests
- Apply sampling techniques
- Clean and sanitise equipment
- Conduct routine preventative maintenance

Where related units are required to operate an evaporator in the workplace, units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Outer Packaging 2

Related learning resources:

- Industrial Communication B
- Occupational Health and Safety B
- Quality Assurance B
- Food Safety B (Hygiene and Sanitation B and C)
- Routine Testing (Fruit and Vegetables)
- Routine Testing (Dairy)
- Routine Sampling (Dairy)
- Cleaning and Sanitation

FDF AWOS3 A

Operate a system (Aerated Waters)

Descriptor

This is a specialist unit that has been customised for the aerated waters sector. It covers the preparation and operation of a production or packaging system.

A system typically describes the operation of an entire process which may comprise a number of sub-systems. System operation requires higher level planning and problem solving skills than are necessary when operating an individual sub-system or piece of equipment. It can also involve facilitating the work of others.

Range of variables

The range of variables provides further advice to interpret the scope and context of this unit of competence. It assumes:

- Work is carried out in accordance with company procedures, licensing requirements, legislative requirements and industrial awards and agreements
- System operation typically involves planning, co-ordination and troubleshooting within their level of authority
- Aerated waters processes typically include syrup preparation, water treatment, heat treatment product preparation, container filling, post-mix packaging, outer packaging and warehousing
- Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical), quality and regulatory control points as well as inspection points
- Information systems may be print or screen based
- Co-ordination, planning and troubleshooting is undertaken with assistance from others
- Workplace systems are in place to support production/packaging processes. These include quality, food safety, occupational health and safety and environmental management

Element	Performance criteria	Evidence guide – Part A
Prepare the system for operation	<p>Supply of materials is confirmed to meet production/packaging requirements</p> <p>Work area is prepared for operation</p> <p>Services are confirmed as available and ready for operation</p> <p>Equipment is checked to confirm readiness for use</p> <p>The system is set to meet specifications</p>	<p>Part A of the Evidence guide identifies the skills and knowledge to be demonstrated to confirm competence for this unit. Part B of the Evidence guide outlines how this guide is to be applied. Both parts should be read in conjunction with the Range of variables.</p> <p>Demonstrated ability to:</p> <ul style="list-style-type: none"> – liaise with relevant work areas to confirm or secure necessary materials, services, equipment and labour to meet production requirements – confirm that all equipment within the system meets hygiene and sanitation standards, all safety guards are in place and equipment is ready for operation – confirm that materials and/pr packaging consumables have been cleared for use – monitor implementation of set-up and start up procedures. This may involve monitoring the use of checksheets by others – monitor observance of work procedures and systems (<i>cont.</i>)

Element	Performance criteria	Evidence guide – Part A
Operate and monitor the system	<p>The system is started up according to company procedures</p> <p>Control points are monitored to confirm performance is maintained within specification</p> <p>System outputs meet specification</p> <p>Equipment is monitored to confirm operating condition</p> <p>Out-of-specification product, process and equipment performance is identified, rectified and/or reported</p>	<p><i>Demonstrated ability to: (continued)</i></p> <ul style="list-style-type: none"> – monitor materials flow and work-in-progress through the system – confirm that the system operates within specified parameters and control points are monitored – determine responses to out-of-specification results or non-conformance within level of responsibility – co-ordinate batch/product changeovers – communicate information effectively – plan maintenance and cleaning procedures to minimise disruption – monitor operating efficiencies of the system and investigate, resolve and/or report problems – review and maintain procedures to support system improvements
Shut down the system	<p>The system is shut down according to company procedures</p> <p>Equipment is cleaned and maintained to meet cleaning schedule and procedural requirements</p> <p>Waste generated by both the process and cleaning procedures is collected, treated and disposed or recycled according to company procedures</p>	<p>Underpinning knowledge:</p> <ul style="list-style-type: none"> – purpose and principles of the system – equipment purpose and operation including an understanding of process control systems where used – technical knowledge of product/packaging characteristics and processing/packaging requirements – codes and legislation relating to product and packaging requirements – equipment calibration schedule and responsibilities – type and purpose of sampling and testing conducted – related work areas and departments
Contribute to continuous improvement of the system	<p>Quality of process outputs is assessed against specifications</p> <p>Opportunities for improvement are identified and investigated</p> <p>Proposals for improvements are developed and implemented within company planning arrangements and according to company procedures</p>	<ul style="list-style-type: none"> – relevant procedures, specifications and operating parameters – relevant systems and legislative responsibilities in areas such as human resources, food safety, quality, occupational health and safety and environmental management – industrial awards and agreements relating to system operation – hazards, risks, controls and methods for monitoring processes within the system – maintenance and cleaning requirements of equipment in system – process improvement procedures and related consultative arrangements – troubleshooting procedures and problem solving techniques – recording and reporting requirements

– Element	– Performance criteria	– Evidence guide – Part A
Record information	Workplace information is recorded in the appropriate format	

Evidence guide – Part B

Assessment guide

- Assessment must take account of the food industry's endorsed assessment guidelines and may use the non-endorsed *Assessment Framework for the Food and Beverage Processing Industry NFITC June 1995*.
- The competencies described in this unit need to be performed over time and events, under normal workplace conditions, having due regard for the key assessment principles of validity, reliability, fairness and flexibility.
- Assessment should be structured on whole of work activities giving emphasis to confirming that the assessee can achieve the workplace outcomes described in the Performance criteria, including demonstration of the underpinning knowledge and skills contained in the Evidence guide.
- The equipment used should be the actual items described in the Range of variables and Assessment context.
- The procedures and documentation should be those typically used in a workplace. Compliance with statutory occupational health and safety, food safety, hygiene and environmental requirements relevant to the food processing industry should be emphasised.
- Assessment should reinforce the integration of the key competencies and the food industry's core competencies for the particular AQF level.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.
- Assessment should not require a higher level of communication competency than that specified in the core competencies for the particular AQF level.

Assessment context

Assessment of this unit must occur in a real or simulated workplace. Such an environment must provide an opportunity for the assessee to prepare and operate a production or packaging system given:

- work procedures including advice on safe work practices, food safety and environmental requirements for processes within the production/packaging system
- company policies and workplace systems including human resources, OHS, quality, food safety and environmental management
- production/packaging schedule
- sampling and testing schedules as required
- specifications, control points and processing parameters for processes within the production/packaging system
- production/packaging system equipment
- personnel operating the production/packaging system
- services
- related work areas and communication system
- relevant OHS clothing and equipment
- cleaning, calibration and maintenance schedules as required
- troubleshooting advice where available

- documentation and record keeping system
- planning, resources management and training arrangements

Relationship to other units

Pre-requisites or equivalent:

- Collect, present and apply workplace information
- Implement occupational health and safety principles and procedures
- Implement the quality system
- Implement the food safety plan

Co-requisites:

- Analyse and convey workplace information
- Monitor the implementation of occupational health and safety
- Monitor the implementation of the quality system
- Monitor the implement the food safety plan

Related units:

- Facilitate teams

Where related units form an integral part of system operation in the workplace, these units should be co-assessed.

Relationship to learning resources

Main learning resource:

- Beverage System Preparation and Operation

Related learning resources:

- Industrial Communication C
- Quality Assurance C
- Occupational Health and Safety C
- Food Safety C (Hygiene and Sanitation D)
- Work Team Communication