



Australian Government

FBPGRA3017 Operate and monitor a liquid, mash or block stock feed process

Release: 1

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Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to set up, operate, monitor and shut down process equipment used to produce liquid, mash or block stock feed. It also includes troubleshooting routine problems that occur with processing.

The unit applies to plant operators involved in the production of liquid, mash and block stock feeds for a variety of animal species and animal production requirements. Operators take responsibility to implement standard operating procedures as directed. Stock feeds can be prepared as standard products or to particular customer specification.

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

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

Pre-requisite Unit

Nil

Unit Sector

Grain Processing (GRA)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare the equipment and process for operation	1.1 Confirm materials are available to meet product recipe requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.2 Select, fit and use personal protective clothing and equipment according to safety requirements 1.3 Identify and confirm cleaning and maintenance requirements have been met according to health, safety and food safety procedures 1.4 Fit and adjust machine components and related attachments according to operating requirements and safety procedures 1.5 Enter processing or operating parameters to meet safety and production requirements 1.6 Carry out pre-start checks according to operator instructions
2. Operate and monitor equipment	2.1 Start and operate the process according to safe operating procedures 2.2 Monitor equipment and services to ensure optimal operations 2.3 Identify any variation in equipment operation, and troubleshoot to identify solution 2.4 Adjust equipment performance to ensure optimum performance 2.5 Identify, rectify or report out-of-specification product or process outcomes 2.6 Maintain the work area according to safe work and food safety procedures 2.7 Maintain workplace records, including traceability and biosecurity records, according to workplace procedures
3. Shut down the process	3.1 Identify the appropriate shutdown procedure 3.2 Shut down the process safely according to operating procedures 3.3 Identify and report maintenance requirements according to workplace procedures 3.4 Ensure waste is disposed of in line with environmental requirements

Foundation Skills

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

Skill	Description
Reading	- Interpret standard stock feed orders and customer specification requirements - Operate equipment using digital screens
Writing	Complete processing records using digital and/or paper-based formats
Numeracy	- Measure product and ingredients using weight (g, kg, T) and volume (ml, L), to two decimal points - Accurately scale recipes up and down - Accurately interpret readings on gauges and scales

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FBPGRA3017 Operate and monitor a liquid, mash or block stock feed process	FBPGRA2001 Operate a liquid, mash or block stockfeed process	Unit title and code updated to better match work task Minor changes to Performance Criteria to clarify intent Foundation Skills refined Performance Evidence clarified Minor changes to Knowledge Evidence and Assessment Conditions	Equivalent

Links

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

Assessment Requirements for FBPGRA3017 Operate and monitor a liquid, mash or block stock feed process

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Performance Evidence

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

There must be evidence that the individual has operated and monitored a liquid, mash or block stock feed process to produce at least one batch of stock feed to specification, including:

- applying safe work practices
- applying food safety procedures to work practices
- adding and mixing ingredients, micronutrients and additives to meet product specification
- taking corrective action in response to typical faults and inconsistencies.

Knowledge Evidence

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

- purpose and basic principles of each part of the process, including:
 - volumetric metering, mixing, steam conditioning, pouring, pressing, cooling, adding and mixing in micronutrient and other additives to achieve specified proportions
 - sequencing of production to minimise transference and cross-contamination
 - traceability procedures
 - biosecurity procedures
- basic operating principles of equipment, including:
 - main equipment components
 - status and purpose of guards
 - equipment operating capacities and applications
 - the purpose and location of sensors and related feedback instrumentation
- services required, and action to take if services are not available
- basic operating principles of process control, including the relationship between control panels and systems and the physical equipment

- good manufacturing practices (GMP) relevant to work task
- the flow of the stock feed production process and the effect of outputs on downstream processes
- quality characteristics and uses of finished stock feed
- effect of variation in inputs and services on process performance
- operating requirements and parameters, and corrective action required where operation is outside specified operating parameters
- the effect on final product of variation in variables, including:
 - oil and fat content
 - micronutrient and additive
 - consistency and appearance of mash, liquid or block stock feed
 - retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition
 - retention time and temperature for liquid addition
- typical equipment faults and related causes, including:
 - signs and symptoms of faulty equipment
 - early warning signs of potential problems
- methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing
- inspection or test points (control points) in the process, and the related procedures and recording requirements
- common causes of variation, and corrective action required
- contamination/cross-contamination and food safety risks and related controls
- health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the process and workplace requirements, including:
 - emergency and routine shutdowns
 - procedures to follow in the event of a power outage
 - routine maintenance procedures
- cleaning and sanitisation procedures relevant for producing liquid, mash and block stock feed
- isolation, lock-out and tag-out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- cleaning and sanitisation procedures for workspace and equipment
- procedures to track traceability of product
- procedures to ensure biosecurity requirements are met.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - a stock feed processing workplace or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - personal protective equipment and clothing
 - stock feed inputs and additives
 - processing equipment
- specifications:
 - workplace procedures, including safe work practices, food safety, quality, and environmental requirements
 - stock feed orders.

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

Links

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