Modification history

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package version 5.0.

FBPGRA3XX1	Operate and monitor a liquid, mash or block stockfeed process
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 stockfeed. 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 stockfeeds for a variety of animal species and animal production requirements. Stockfeeds can be prepared as standard products or to particular customer specification.
	All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace.
	No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.
Prerequisite Unit	Nil
Unit Sector	Grain processing (GRA)

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare the equipment and process for operation	1.1 Confirm materials are available to meet product recipe requirements1.2 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	2.1 Start and operate the process according to safe operating procedures
equipment	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 Skill	S
	es those language, literacy, numeracy and employment skills that are essential for nit of competency but are not explicit in the performance criteria.
Skill	Description
Reading	 Interpret standard stockfeed orders and customer specification requirements Operate equipment using digital screens
Writing	Complete processing records using electronic, 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 previous version	Comments	Equivalence status
Operate and operat	FBPGR2001 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 unit
Links	Companion Vo	lumes including Implement	tation Guides, are available at

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

Performance Evidence in individual demonstrating competency must satisfy all of the elements and performance criteria in this inter must be evidence that the individual has operated and monitored a liquid, mash or block stockfeer crocess to produce at least one batch of stockfeed to specification, including: applying safe work practices applying food safety procedures to work practices (nowledge Evidence win individual must be able to demonstrate the knowledge required to perform the tasks outlined in the ilements 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 if micronutrient and other additives to achieve specified proportions sequencing of production to minimise transference and cross-contamination traceability procedures basic operating principles of equipment, including: e main equipment components status and purpose of guards e equipment operating capacities and applications e the purpose and location of 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 stockfeed production in process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating principles of process control, including consequences of temperatures the effec	TITLE	Assessment requirements for FBPGRA3XX1 Operate and monitor a liquid, mash or block stockfeed process
nit. There must be evidence that the individual has operated and monitored a liquid, mash or block stockfeer rocess to produce at least one batch of stockfeed to specification, including: applying odd 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. Cnowledge Evidence In individual must be able to demonstrate the knowledge required to perform the tasks outlined in the lements and performance criteria of this unit. This includes knowledge of: purpose and baic ptrinciples of eath part of the proses, including: • volumetric metering, mixing, steam conditioning, pouring, pressing, cooling, adding and mixing in micronutrient and other additives to achieve specified proportions • sequencing of production to minimise transference and cross-contamination • traceability procedures basic operating principles of equipment, including: • main equipment components • status and purpose of guards • equipment operating capacities and applications • the purpose and location of sensors and related feedback instrumentation services required and action to take if services are not available basic operating principles of process control, including the relationship between control panels and systems and the physical equipment good manufacturing practices (GMP) relevant to work task the flow of the stockfeed orduction in process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect of finished stockfeed • retention time and temperature for liquid addition typical equipment thand additive • consistency and appearance of mash, liquid or block stockfeed • retention time and temperature for liquid additio	Performance Evi	dence
nit. There must be evidence that the individual has operated and monitored a liquid, mash or block stockfeer rocess to produce at least one batch of stockfeed to specification, including: applying odd 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. Cnowledge Evidence In individual must be able to demonstrate the knowledge required to perform the tasks outlined in the lements and performance criteria of this unit. This includes knowledge of: purpose and baic ptrinciples of eath part of the proses, including: • volumetric metering, mixing, steam conditioning, pouring, pressing, cooling, adding and mixing in micronutrient and other additives to achieve specified proportions • sequencing of production to minimise transference and cross-contamination • traceability procedures basic operating principles of equipment, including: • main equipment components • status and purpose of guards • equipment operating capacities and applications • the purpose and location of sensors and related feedback instrumentation services required and action to take if services are not available basic operating principles of process control, including the relationship between control panels and systems and the physical equipment good manufacturing practices (GMP) relevant to work task the flow of the stockfeed orduction in process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect of finished stockfeed • retention time and temperature for liquid addition typical equipment thand additive • consistency and appearance of mash, liquid or block stockfeed • retention time and temperature for liquid additio	An individual demons	trating competency must satisfy all of the elements and performance criteria in this
<pre>rocess to produce at least one batch of stockfeed to specification, including: applying safe work practices adding and mixing ingredients, micronutrients and additives to meet product specification taking corrective action in response to typical faults and inconsistencies.</pre> Cnowledge Evidence In individual must be able to demonstrate the knowledge required to perform the tasks outlined in the iernents 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 biosecurity procedures status and purpose of guards equipment components tsatus and purpose of guards equipment components 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 dom data the physical equipment process sperformance operating principles of process control, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures to status and corrective action required where operation is outside specified operating parameters oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including inspecting, measuring	unit.	
 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. Cnowledge Evidence Individual must be able to demonstrate the knowledge required to perform the tasks outlined in the itements 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 ite 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 stockfeed production process performance operating parameters the effect of variation in inputs and services on process performance operating parameters the effect of number and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperature for liquid addition typical equipment for the mash, liquid or block stockfeed retention time and temperature for liquid addition typical equipment of faulty equipment signs and symptoms of faulty equipme		
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. Cnowledge Evidence In individual must be able to demonstrate the knowledge required to perform the tasks outlined in the lements and performance criteria of this unit. This includes knowledge of: purpose and basic principles of each part of the process, including: • volumetric metering, mixing, steam conditioning, pouring, pressing, cooling, adding and mixing in micronutrient and other additives to achieve specified proportions • sequencing of production to minimise transference and cross-contamination • traceability procedures basic operating principles of equipment, including: • main equipment components • status and purpose of guards • equipment operating capacities and applications • the purpose and location of sensors and related feedback instrumentation services required and action to take if services are not available basic operating principles of process control, including the relationship between control panets and systems and the physical equipment good manufacturing practices (GMP) relevant to work task the flow of the stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: • oil and fat content • micronutrient and additive • consistency and appearance of mash, liquid or block stockfeed • retention time and temperature for isquid addition typical equipment fault and related causes, including: • signs and symptoms of faulty equipment methods used to monitor the mash, liquid or block feed process, including inspecting, measurin	-	
adding and mixing ingredients, micronutrients and additives to meet product specification taking corrective action in response to typical faults and inconsistencies.		•
taking corrective action in response to typical faults and inconsistencies.		
Anowledge Evidence In individual must be able to demonstrate the knowledge required to perform the tasks outlined in the lements 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 it 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are to high and too low on chemical composition treating unicipated and addition typical equipment and temperature for liquid addition typical equipment and temperature for liquid addition typicat equipment and temperature for liquid addition typicat equipment and corrective action required consistency and spearance of mash, liquid or block feed procedures and recording re	-	
 In individual must be able to demonstrate the knowledge required to perform the tasks outlined in the lements 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of alulty equipment early warning signs of pointial problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing inspection or test points (control p		
 lements 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating parameters, and corrective action required where operation is outside specified operating parameters, and corrective action required where operation is outside specified operating parameters. oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including inspecting, measuring and testing signs and symptoms of foulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing signs and symptoms of faulty equipment early warning signs of potential problems method	Knowledge Evid	ence
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating practices (GMP) relevant to work task the effect on final product of variation in variables, including: oil and fat content micronutrient and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing inspection or test points (control points) in the process, and the related procedures and recording requiremen	An individual must be	able to demonstrate the knowledge required to perform the tasks outlined in the
 volumetric metering, mixing, steam conditioning, pouring, pressing, cooling, adding and mixing is 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed of variation in inputs and services on process performance operating prameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including inspecting, measuring and testing	elements and perform	nance criteria of this unit. This includes knowledge of:
micronutrient and other additives to achieve specified proportions sequencing of production to minimise transference and cross-contamination traceability procedures basic operating principles of equipment, including: main equipment components 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 appro		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing inspection or test points (control points) in the process, and the related procedures and recording requirements common causes of variation and corrective action required controls health a		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating praumeters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and 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 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 		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating prameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperature 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		· · · · · · · · · · · · · · · · · · ·
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating prequirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of 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 control points (control points) in the process, and the related controls health and safety hazards and controls, including the limitations of protective clothing and equipment relevant to the work process 		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 equipmen relevant to the work process		·
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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, 		
 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 stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 equipmen relevant to the work process 		
 systems and the physical equipment good manufacturing practices (GMP) relevant to work task the flow of the stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 good manufacturing practices (GMP) relevant to work task the flow of the stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 equipmen relevant to the work process 		
 the flow of the stockfeed production process and the effect of outputs on downstream processes quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 quality characteristics and uses of finished stockfeed effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 	-	
 effect of variation in inputs and services on process performance operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 operating requirements and parameters, and corrective action required where operation is outside specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 specified operating parameters the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 		
 the effect on final product of variation in variables, including: oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 equipmen relevant to the work process 		
 oil and fat content micronutrient and additive consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		
 consistency and appearance of mash, liquid or block stockfeed retention time and temperatures for steam conditioning, including consequences of temperatures that are too high and too low on chemical composition retention time and temperature for liquid addition typical equipment faults and related causes, including: signs and symptoms of faulty equipment early warning signs of potential problems methods used to monitor the mash, liquid or block feed process, including inspecting, measuring and testing 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		· ·
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 	 micronutrient 	and additive
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 	 consistency a 	and appearance of mash, liquid or block stockfeed
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		
 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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements, 		
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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements,		
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 equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements,	testing	
contamination/cross contamination and food safety risks and related controls health and safety hazards and controls, including the limitations of protective clothing and equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements,	requirements	
health and safety hazards and controls, including the limitations of protective clothing and equipmen relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements,		·
relevant to the work process requirements of different shutdowns as appropriate to the process and workplace requirements,		•
	relevant to the wo	prk process
including:		lifferent shutdowns as appropriate to the process and workplace requirements,
emergency and routine shutdowns	•	

Knowledge Evidence

- procedures to follow in the event of a power outage
- routine maintenance procedures
- cleaning and sanitation procedures relevant for producing liquid, mash and block stock feed
- isolation, lock out and tag out procedures and responsibilities
- procedures and responsibility for reporting production and performance information
- environmental issues and controls relevant to the process, including waste/rework collection and handling procedures related to the process
- cleaning and sanitation procedures for work space and equipment
- procedures to track traceability of product
- procedures to ensure biosecurity requirements are met.

Assessment Conditions

Assessment of skills must take place under the following conditions:

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

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

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