



Australian Government

Department of Education, Employment and Workplace Relations

FDFGR2010A Handle grain in a storage area

Revision Number: 1

FDFGR2010A Handle grain in a storage area

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the skills and knowledge required to handle grain in a storage area, including taking samples, segregating and moving grain in a manner that minimises dust and exposure to pests.
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Application of the Unit

Application of the unit	This unit has application in a grain processing environment for human or stock consumption. It typically targets the production worker responsible for applying basic operating principles to the storage of grain in permanent or temporary storage facilities.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Sample grain for testing	1.1. Representative samples of grain are taken for testing according to regulatory requirements 1.2. Samples are prepared for despatch, including labelling and packaging according to enterprise requirements
2. Move grain into and out of storage	2.1. Grain for handling and storage is correctly identified 2.2. Appropriate silo types and handling equipment are selected for various grains in relation to their storage characteristics and flow properties 2.3. Grain is segregated according to type, variety and quality characteristics according to enterprise requirements and appropriate records kept 2.4. Measures are taken to minimise pest infestation 2.5. Grain is moved into and out of storage according to occupational health and safety (OHS) requirements 2.6. Grain is regularly checked during movement for contamination 2.7. Storage and handling equipment are thoroughly cleaned after emptying 2.8. Temporary storages are dismantled according to enterprise requirements and storage characteristics 2.9. Suitable measures are implemented to minimise the effect of desiccant dusts on the flow properties of grain

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Ability to:

- access workplace information to identify grain storage requirements
- select, fit and use personal protective clothing and/or equipment
- confirm supply of necessary materials and services
- start, operate, monitor and adjust equipment used to move and store grain to achieve required outcomes
- monitor supply and flow of materials to and from the grain cleaning process
- take corrective action in response to out-of-specification results
- respond to and/or report equipment failure within level of responsibility
- locate emergency stop functions on equipment
- follow isolation and lock out/tag out procedures as required to take grain cleaning process and related equipment off-line in preparation for cleaning and/or maintenance within level of responsibility
- conduct pre-operational checks, start up, and safely and effectively operate and shut down equipment, including emergency shutdown procedures
- coordinate with others on site
- position initial load for even grain distribution
- safe and correct use of mobile and other equipment
- dismantling of temporary storage of the type used by enterprise
- maintain work area to meet housekeeping standards
- use process control systems according to enterprise procedures
- collect samples and conduct tests according to enterprise procedures
- conduct routine maintenance according to enterprise procedures
- clean and sanitise equipment according to enterprise procedures
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning, active listening, asking for clarification and seeking advice from supervisor
- work cooperatively within a culturally diverse workforce

Required knowledge

Knowledge of:

- grain hygiene and sealing requirements
- grain varieties and types
- segregation requirements to maintain integrity and quality of grain
- flow of grain in storage area from receipt to despatch

REQUIRED SKILLS AND KNOWLEDGE

- typical storage equipment faults and related causes, including signs and symptoms of faulty equipment and early warning signs of potential problems
- contamination/food safety risks associated with the grain storage process and related control measures
- occupational health and safety (OHS) hazards and controls, including the limitations of protective clothing and equipment relevant to the work process
- requirements of different shutdowns as appropriate to the grain storage process and workplace requirements, including emergency and routine shutdowns and procedures to follow in the event of a power outage
- isolation, lock out and tag out procedures and responsibilities
- environmental issues and controls relevant to the grain storage process
- basic operating principles of process control, where relevant, including the relationship between control panels and systems and the physical equipment
- sampling and testing associated with process monitoring and control where relevant
- routine maintenance procedures where relevant
- cleaning and sanitation procedures where relevant

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Assessment must be carried out in a manner that recognises the cultural and literacy requirements of the assessee and is appropriate to the work performed. Competence in this unit must be achieved in accordance with food safety standards and regulations where the unit is applied for grains intended for human consumption.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of ability to:

- take required samples
- conduct pre-start checks on machinery and equipment used for grain storage and transfers
- start, operate, monitor and adjust process equipment
- recognise different grain types and varieties
- check grain for pest and other contamination
- take corrective action in response to typical faults and inconsistencies
- complete workplace records as required
- apply safe work practices and identify OHS hazards and controls
- safely shut down equipment
- apply food safety procedures to work practices where grain is intended for human consumption.

Context of and specific resources for assessment

Assessment must occur in a real or simulated workplace where the assessee has access to:

- personal protective clothing and equipment
- work procedures, including advice on safe work practices, food safety, quality and environmental requirements
- information on equipment capacity and operating parameters
- storage and transfer instructions
- grain storage and transfer equipment and services
- materials required for the grain storage process
- sampling schedules and test procedures and equipment as required
- documentation and recording requirements and

EVIDENCE GUIDE	
	procedures.
Method of assessment	This unit should be assessed together with core units and other units of competency relevant to the function or work role. Examples could be: • FDFOP2004A Clean and sanitise equipment • FDFOP2011A Conduct routine maintenance • FDFOP2013A Apply sampling procedures • FDFOP2030A Operate a process control interface • MSL973001A Perform basic tests.
Guidance information for assessment	To ensure consistency in one's performance, competency should be demonstrated on more than one occasion over a period of time in order to cover a variety of circumstances, cases and responsibilities, and where possible, over a number of assessment activities.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Policies and procedures	All work is carried out according to company policies and procedures, regulatory and licensing requirements, legislative requirements, and industrial awards and agreements
Grains	Grains are those stored by the enterprise and may include: • cereals • legumes • pulse crops • oilseeds • pasture seeds
Grain movements	Grain movements may be for the purposes of: • receipt • despatch • aeration • treatment and/or blending of grain grades
Storage facility	Storage facility covers: • all types of temporary and permanent storage
Sampling and analysis equipment	Sampling and analysis equipment includes: • all testing apparatus • sampling, measuring and sieving equipment • operational charts • calibration and identification samples • enterprise/client instructions
Samples for testing	Samples may be for different tests, including: • moisture • insects (live and dead) • weed and other commodity seeds • other foreign matter

RANGE STATEMENT	
	• cracked grain • weather affected grain • grain size and weight • disease identification • germination
Handling equipment	Handling equipment used includes: • silo conveyors • elevators • chutes • augers
Other equipment	Other equipment used may include: • computing equipment used by enterprise • two way radio/telephone • tractors • front end loaders • wall charts and other visual recording methods • warning devices • ventilation/aeration equipment
Equipment checks	Equipment checks may include: • mechanical units integral to grain handling equipment, such as gear boxes, bearings and oil levels
Other personnel	Other personnel involved may include: • other operators at storage site • truck drivers • silo operators • weighbridge operators • associated office personnel
Documentation	Documentation may cover: • quantities and grades stored • grain movements and cartage documentation • weigh tally sheets • equipment and operations log sheets • stock checks
Potential emergency situations	Potential emergency situations may include: • inclement weather during operations

RANGE STATEMENT

	• machinery breakdowns • power outages • storm damage to equipment and site
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Unit Sector(s)

Unit sector	Grain processing
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		