



Australian Government

Department of Education, Employment and Workplace Relations

RTE2212A Prepare grain storages

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of safely maintaining the site, the storage and equipment for handling, and storage of bulk materials. At the completion of the work described in this standard, storages, surrounding areas and equipment are prepared in readiness for receiving grain at an acceptable level of hygiene.

Work is likely to be under routine supervision with intermittent checking. Responsibility for some roles and co-ordination within a team may be required. Preparing bulk material storages is usually within established routines, methods and procedures. Competency at this level involves the application of knowledge and skills in the maintenance of facilities, tools and equipment.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Prepare to work in bulk material storage area	1.1 Work to be undertaken is interpreted from work program where necessary, and confirmed with supervisor. 1.2 OHS hazards are identified, risk assessed and suitable controls implemented. 1.3 Suitable personal protective equipment is selected, used and maintained. 1.4 Tools and equipment suitable for the work to be undertaken are selected, checked and maintained, if necessary. 1.5 Environmental implications of undertaking work in the bulk material storage area are identified, likely outcomes assessed and, if necessary, responsible action taken.
2 Prepare storage area	2.1 Storage site is cleaned of weeds, dust and spillage to organisation requirements. 2.2 Refuse is disposed of according to regulatory requirements. 2.3 Site is maintained in a clean and tidy condition according to organisation requirements. 2.4 Storage site is prepared according to OHS standards.
3 Prepare storages	3.1 Storages are prepared according to OHS standards. 3.2 Bulk material storages are cleaned of all residues according to organisation requirements. 3.3 Bulk material storages are checked for structural safety, damage or deterioration, and repaired or reported as required according to organisation requirements. 3.4 Temporary storages are prepared and erected to meet the needs of the organisation according to OHS standards.

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| 4 Prepare bulk material handling machinery | 4.1 Bulk material handling machinery is cleaned free of contamination and residues according to organisation requirements. |
| | 4.2 Bulk material handling equipment is adjusted and set according to organisation requirements. |
| | 4.3 Bulk material handling equipment is prepared ready for use according to manufacturers instructions and OHS standards. |
| 5 Complete maintenance operations | 5.1 Workplace information is recorded clearly and accurately in the format and at the time required by the organization. |
| | 5.2 Waste is collected and disposed of or recycled to minimise damage to the external environment . |
| | 5.3 Tools and equipment are cleaned and stored according to organisation work procedures. |

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in preparing bulk material storages requires evidence that the storage facility, the surrounding area, and the bulk material handling equipment are clean, operable, and within the hygiene standards required by the organisation.

The skills and knowledge required to prepare bulk material storages must be **transferable** to a different work environment. For example, across a range of storage facility types, materials and enterprise guidelines.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

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

erection/dismantling for types of temporary storage used by organisation

organisation and commodity quality requirements

.organisation hygiene requirements

typical signs of damage to be documented and reported

appropriate legislative requirements, manufacturers instructions and organisation procedures/ instructions

appropriate action in contingency situations

organisation requirements for protective equipment and safe practices in relation to OHS

pre-operational and safety checks, servicing and maintenance procedures for tools and equipment

potential hazards associated with the operation of basic tools and equipment

general machine maintenance procedures

machinery operating principles and operating methods

machinery storage and protection methods

relevant State/Territory legislation, regulations and codes of practice with regard to workplace OHS, and the use and control of machinery and equipment

environmental impacts associated with the operation of machinery and equipment

personal protective clothing and equipment and when and how it should be used

cleaning and storage of machinery, equipment and materials

organisation recording and reporting procedures.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These skills are:

erect simple temporary bulk material storages

use communication systems

check equipment and storage facilities, and identify current or impending faults

handle and manoeuvre equipment

complete pre-operational checks on basic tools and equipment

perform routine safety, service and maintenance procedures on tools, equipment and machinery

operate hand and independently powered tools and cleaning equipment to industry standards

clean, secure and store machinery and equipment

perform basic trouble shooting

recognise and rectify minor operational faults

handle hazardous substances (fuels) safely

read and interpret manufacturers specifications, work and maintenance plans, and Material Safety Data Sheets

interpret and apply task instructions, communicate with work team and supervisor, and record and report faults, workplace hazards and accidents.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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| 1. How can communication of ideas and information (1) be applied? | In interpreting and clarifying the work that is required to be done with employer/manager and other co-workers. |
| 2. How can information be collected, analysed and organised (1)? | In determining what work is required and what resources/tools will be needed. |
| 3. How are activities planned and organised (1)? | In working out what order the work should be done to co-ordinate with other activities on the site. |
| 4. How can team work (1) be applied? | In completing specified activities and operations with co-workers. |
| 5. How can the use of mathematical ideas and techniques (1) be applied? | In calibrating and maintaining the equipment and tools used. |
| 6. How can problem-solving skills (1) be applied? | In assessing the extent of maintenance requirements and selecting an approach for the repair. |
| 7. How can the use of technology (1) be applied? | In the use of communication equipment. |

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance** and **where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work contexts

What **OHS hazards** apply to this standard?

Amongst the risks are operating and maintaining machinery and equipment, including hydraulics and exposed moving parts, noise, organic and other dusts, working with, transporting and storing hazardous substances (such as pesticides), using fumigants, working at heights, and working on the bulk material mass.

What actions could be taken to eliminate or minimise **OHS** risk?

The range of actions are both systemic and at an operational level. These are listed below.

Systems should be in place to ensure the safe operation and maintenance of machinery and equipment. Precautions should also be in place to minimise exposure to noise and organic and other dusts. Systems and procedures for handling and storing bulk material, as well as working with and around electricity, should also be in place.

Fixtures should be in place in all silos and storage sheds, including appropriate access ladders, hand rails and ladder cages.

Personal protective equipment should be selected, used and maintained.

Environmental conditions should be controlled. For example, keeping moisture levels as low as possible will reduce the likelihood of fire and silo collapse.

Procedures should be in place and used for working on top of stored bulk material, working with bulk material mass movement and stability, working within confined working spaces, moving vehicles, and working at height.

Record keeping should ensure that

	requirements in relation to properly observing and using product labels and MSDS sheets, instruction manuals and written organisational procedures.
What personal protective clothing and equipment may be relevant to this standard?	Boots, hat/hard hat, overalls, gloves, protective eyewear, hearing protection, respirator or face mask, and sun protection (sun hat, sun screen).
What equipment is likely to be used for the cleaning and maintenance work?	Cleaning equipment for hand use, air compressors, vacuum cleaners, mobile load handling plant, mowers/slashers, loading and unloading equipment, tractors, and portable augers.
What kind of preparation is required for cleaning and mobile equipment ?	Site cleaning and mobile equipment use includes pre-operational checks, start-up, shutdown, and minor servicing to organisation requirements.
What bulk materials may be stored at the site?	Bulk materials stored may include the entire range produced or used by the organisation and may include grains (cereals, legumes, pulses, oilseeds, or pasture seeds), animal feed (e.g. meal), flour and fertilizers.
What storage facilities and surroundings might be subject to maintenance and cleaning?	They may be permanent and/or temporary storages, fixed and/or portable commodity handling equipment, the surrounding areas, entry, exit and site roads.
What areas are subject to the cleaning activities?	They are the handling of equipment, storage facilities, buildings and surrounding grounds.
What cleaning and maintenance will be involved?	On the storage site, it will be aspects of site tidiness and cleanliness, weed control, and cleaning of spilled materials and rubbish.
What might be identified in the storage area that will need to be cleaned up, maintained , or repaired?	The presence of water or water damage, presence and activity of pests including insects, moulds, birds and rodents, dead vertebrate pest in storage, breakdown of storage security and integrity, e.g. holes, cracks, poor sealing or general physical deterioration, storm damage, and/or level of hygiene will need to be seen to.
What workplace information is likely to be	Records may include environmental

recorded?	parameters, date of maintenance work, and what has been checked/maintained.
What type of waste may be collected?	Waste may include left over treatments, unused containers, general debris, or discarded components.
What are the implications for the external environment when undertaking this work?	Environmental implications may include the contamination of off-site ground water or soils from solids, debris, nutrients or chemicals.
What might the organisations and statutory instructions include?	They might be those relating to health and safety, quality control, administrative reporting, commodity storage and movement control, residual fumigants and confined space entry.
Potential emergency situations may include.	Inclement weather during operations, machinery breakdowns, and storm damage to equipment and site.

For more information on contexts, environment and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.