



Australian Government

Department of Education, Employment and Workplace Relations

PRMWM38B Process waste

Release: 1

PRMWM38B Process waste

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency describes the processing or treatment of waste.

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

ELEMENT

PERFORMANCE CRITERIA

- | | |
|--------------------------------------|---|
| 1 Organise for processing | 1.1 Review <i>job sheet</i> to identify all waste processing requirements |
| | 1.2 Identify and organise <i>plant, equipment, material and personnel</i> requirements for safe, efficient waste processing |
| | 1.3 Select and fit <i>emergency and personal protective equipment</i> in accordance with work requirements, <i>manufacturers' specifications, company requirements and relevant legislation</i> |
| | 1.4 Identify and manage <i>potential risks and hazards</i> to job requirements in accordance with company requirements, OHS and other relevant legislation |
| 2 Process waste | 2.1 Identify and check <i>waste types for processing</i> to ensure absence of <i>non-conforming waste streams</i> |
| | 2.2 Ensure processing method is appropriate for waste type in accordance with manufacturers' specification and company requirements |
| | 2.3 Operate or use processing plant/equipment/ <i>materials</i> in accordance with manufacturers' specifications, company requirements, OHS and other relevant legislation |
| | 2.4 Make adjustments to processing technique or operation to ensure efficient and effective processing operation |
| 3 Monitor processing | 3.1 Maintain visual observation of processing to ensure <i>safe operation</i> and optimal processing |
| | 3.2 Conduct checks/tests on waste during processing to determine stage of completion and processing requirements in accordance with manufacturers' specifications and company requirements |
| | 3.3 Monitor flows of waste inputs and processed outputs to ensure smooth, constant flow and maximisation of efficiency and effectiveness of operation |
| 4 Conduct quality control inspection | 4.1 Inspect and check processed waste to ensure compliance with processing requirements |
| | 4.2 <i>Document all details of quality control</i> |

ELEMENT**PERFORMANCE CRITERIA**

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| | promptly and accurately and in accordance with job and company requirements |
| 5 Clean up area | 5.1 <i>Clean</i> processed site to ensure safe and effective future operation in accordance with company requirements |
| 6 Document waste processing activities | 6.1 Document waste processing activities accurately and promptly in accordance with company requirements and relevant legislation |

Required Skills and Knowledge

Refer to Evidence Guide

Evidence Guide

EVIDENCE GUIDE

Critical aspects of competency

- Correctly interprets and follows job sheet.
- Identifies and organises plant, equipment, materials and personnel requirements.
- Selects appropriate emergency and personal protective equipment requirements.
- Identifies potential risks and hazards to work.
- Uses appropriate processing method for waste type.
- Correctly operates/uses plant/equipment/materials.
- Maintains visual observation of processing.
- Conducts checks/tests on waste during processing and determines stage of completion.
- Monitors flow of inputs and outputs and maximises processing operation.
- Makes adjustments to processing technique or operation to maximise processing operation.
- Conducts quality control inspection.
- Carries out basic housekeeping.

Knowledge needed to achieve the performance criteria

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

- Waste types and their appropriate processing methods.
- Waste contaminants.
- Potential risks and hazards.
- Processing techniques.
- Basic biology and chemistry.
- Equipment/plant operation.
- Materials required for processing.
- Emergency response procedures.
- Company requirements.
- Plant shut-down, lock-out and isolation procedures.
- Occupational health and safety requirements.
- Duty of care in provision of services.
- Relevant industry standards.
- Relevant legislation.
- Relevant environmental regulations.
- OHS hierarchy of control.

Specific skills needed to achieve the performance criteria

To achieve the performance criteria, some complementary skills are required. These are:

- communication including interpersonal, listening, questioning, following instructions, giving information, signalling, writing
- reading and interpreting job requirements
- plant and equipment operation
- materials handling skills
- identification of waste types
- reading and interpreting gauges and indicators

- mete out doses of chemicals and additives
- computer and software skills
- methodical organisation of work
- planning to undertake a routine task
- hazard identification
- time management
- safe and efficient work practices
- use of emergency and personal protective equipment
- working in confined spaces
- following MSDS.

Other units of competency that could be assessed with this unit

This unit could be assessed on its own or in combination with other competencies relevant to the job function, for example:

- PRMWM05B Identify and segregate waste
- PRMWM18B Dispatch processed waste
- PRMWM34B Maintain an equipment and consumables storage area
- PRMWM37B Conduct minor maintenance and repairs on waste processing plant/equipment.

Resources required to assess this unit

The following resources should be available:

- waste for processing
- processing plant and equipment
- job sheet identifying processing requirements
- personal protective equipment
- MSDS
- site safety plan.

Gaining evidence to assess this unit

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and be observed by the assessor (or assessment team working together to conduct the assessment). The competency is to be demonstrated in a range of situations, which may include customer/workplace interruptions and involvement in related activities normally experienced in the workplace.

Evidence of competency is best obtained by observing activities in the field and reviewing the processing or treatment of waste. If this is not practicable, observations in realistic simulated environments may be substituted.

Consistency in performance

Assessment requires that strategies meet the objectives of clients and comply with industry expectations in the particular client environment. If the environment is narrowly defined or is not representative of industry needs, it will be necessary to assess the unit within a variety of waste management environments or different client needs to assess competency in the processing or treatment of waste.

Oral questioning or written assessment and hypothetical situations (scenarios) may be used to assess underpinning knowledge. (In assessment situations where the candidate is offered a preference between oral questioning and written audit, questions are to be identical.)

Supplementary evidence may be obtained from relevant authenticated correspondence from existing supervisors, team leaders or specialist training staff.

Note: All practical demonstrations must adhere to the safety and environmental regulations relevant to each state or territory.

Key competency levels

There are a number of processes that are learnt throughout work and life that 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. Information below highlights how these processes are applied in this competency standard.

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| 1 Perform the process | 2 Perform and administer the process | 3 Perform, administer and design the process |
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How can communication of ideas and information be applied?	1	Discuss with colleagues elements of waste processing.
How can information be collected, analysed and organised ?	1	Gather information from a number of sources (including relevant legislation and company requirements) about waste processing.
How are activities planned and organised ?	2	Plan activities in the processing, or treatment of waste.
How can teamwork be applied?	1	Work cooperatively with colleagues to process or treat waste.
How can the use of mathematical ideas and techniques be applied?	1	Conduct and document appropriate mathematical calculations.
How can problem-solving skills be applied?	1	Identify and solve risk elements in the processing or treatment of waste.
How can the use of technology be applied?	2	Apply understanding of technological principles and demonstrate physical skills to use appropriate equipment.

Range Statement

RANGE STATEMENT

The range statement links the required knowledge and organisational and technical requirements to the workplace context. It describes any contextual variables that will be used or encountered when applying the competency in work situations. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables may be present for this particular unit. **Cleaning** may include cleaning products/fluids, high pressure water or air-hosing, shovelling, sweeping out, use of decontamination products, vacuuming and water-hosing.

Client/company includes all forms of business enterprises in this context including government agencies, local governments/councils, private and public companies and residents/ratepayers.

Company requirements are found in briefing documents, letters, quality assurance documents, tender/contract documents and verbal or written instructions.

Details of quality control inspection include:

- checklist
- date
- location
- non-conformances

- quality grading
- sign-off by inspector
- time.

Documentation includes but is not limited to:

- accident report
- checklists
- emergency report
- incident report
- maintenance requirements
- non-conformances
- processing operations
- type/amount waste processed.

Emergency and personal protective equipment must include:

- appropriate footwear
- communications equipment
- eye protection
- eyewash kit
- fire extinguishers
- First Aid kit
- gloves
- overalls and protective clothing.

Emergency and personal protective equipment could also include:

- breathing apparatus
- emergency procedure guides
- face shield/mask
- hard hat
- hearing protection
- material safety data sheets (MSDS)
- spill kit.

Emergency response action/procedures include but are not limited to:

- clean up
- contain emergency
- equipment/plant isolation and shut-down
- evacuation
- First Aid
- identify emergency
- make safe
- notification of authorities
- use of appropriate personal protective equipment.

Equipment includes but is not limited to containers, generator, hoses, load shifting equipment, pumps and vacuums.

Job sheet typically includes:

- emergency and personal protective equipment requirements
- personnel requirements

- plant, equipment and materials requirements
- processing requirements
- site requirements
- waste types
- work schedule.

Manufacturers' specifications are found in equipment specifications and operator manuals. **Materials** include baling and packaging materials, cleaning agents, cleaning rags, grease and oil, labels and stickers, stabilising and treatment chemicals, and water.

Non-conforming waste streams include contamination, inferior quality and unacceptable waste streams.

Performance of this unit is carried out in accordance with relevant requirements of the following:

- Australian Standards
- environmental regulations
- legislative requirements
- manufacturers' specifications
- organisational procedures
- relevant state/territory regulations.

Personal protective equipment required will be stored, maintained and worn/fitted in accordance with company requirements and occupational health and safety and other legislation.

Plant includes but is not limited to:

- autoclave
- balers
- boilers
- bunded areas
- centrifuge
- chippers
- compactors
- computer hardware and software
- conveyors
- crushers
- hammer mills
- incinerator
- microwave
- pipes
- safety structures and controls
- separators
- shredders
- sorters
- storage tanks
- treatment tanks
- tub grinders.

Potential risks and hazards are those risks and hazards identified by the organisation that could lead to injury or illness of employees, contractors, visitors or the public; damage to plant, vehicles or property; or that could cause harm to the environment.

This relates to on-site and off-site activities (whether company owned or occupied premises, customer/client premises or public property) over which it could be expected the organisation had control.

Relevant legislation and codes cover state and federal:

- duty of care
- industry codes of conduct
- occupational health and safety
- Australian Standards
- environmental protection legislation.

Safe operating procedures include any activity or operation conducted on site to ensure health and safety of personnel/equipment in the area.

Waste processing could be undertaken at:

- composting facility
- landfill site
- materials recovery facility
- transfer station
- treatment site
- waste generator's site.

Waste types include:

- solid (non-hazardous) e.g. construction and demolition
- liquid (non-hazardous) e.g. chemical and aqueous
- hazardous - regulated, prescribed, quarantined, medical and clinical
- recoverable resources e.g. recyclable and green waste.
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Unit Sector(s)

Not Applicable