



Australian Government

Department of Education, Employment and Workplace Relations

PRMWM59A Carry out waste assessment

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency describes the skills and knowledge required to plan for and conduct a waste assessment of a generator's waste stream (which includes recycling streams). It requires the ability to visually assess the composition and quantity of the waste stream under assessment, review relevant waste management documentation and to identify opportunities to improve resource management. The assessment process should be conducted in accordance with health and safety principles.

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 Determine assessment objectives and scope	1.1 Advise client on <i>benefits</i> and <i>limitations</i> of the process 1.2 Clearly define boundaries of the project in terms of <i>waste streams</i> assessed, time period, processes, sites 1.3 Consult with the <i>client</i> to agree on project outcomes and objectives 1.4 Ensure the project scope will encompass applicable occupational health and safety, legislative and corporate responsibilities 1.5 Identify necessary <i>resources</i> 1.6 Identify the responsibilities of the client and assessor and communicate these responsibilities to them
2 Prepare for waste assessment	2.1 Review waste assessment outcomes and objectives to determine project requirements 2.2 Obtain <i>necessary resources</i> 2.3 Conduct project risk assessment encompassing corporate and legislative requirements 2.4 Develop and implement risk management strategy 2.5 Identify all <i>variables</i> impacting on waste generation such as types and quantities 2.6 Develop waste assessment action plan and communicate to all stakeholders 2.7 Train personnel as appropriate
3 Conduct waste assessment	3.1 Conduct assessment in accordance with <i>waste assessment objectives</i> , OHS and relevant company and legislative requirements <hr/> 3.2 Visually assess waste/recycling containers to determine composition and quantity of waste components in line with the assessment scope and objectives 3.3 Record visual findings by waste type and quantity observed, by department or process 3.4 Conduct a <i>site review</i> to obtain further data on rationale for waste generation, impacts associated with waste generated and barriers for implementation of improved resource recovery systems

ELEMENT	PERFORMANCE CRITERIA
4 Document and analyse waste assessment findings	<p>3.5 Undertake a review of waste documentation to enable assessment of annual quantities to be determined, by waste stream and/or type</p> <p>3.6 Conduct interviews with staff and/or stakeholders on waste management issues</p> <p>4.1 Compile and validate all collected data and information</p> <p>4.2 Conduct consultations with stakeholders to determine opportunities for resource recovery and necessary resource requirements to implement those opportunities</p> <p>4.3 Analyse data and identify opportunities to improve resource management</p> <p>4.4 Review opportunities in terms of feasibility of implementation</p> <p>4.5 Present outcomes of the feasibility review together with all data in a format consistent with the objectives of the project</p> <p>4.6 Prepare implementation and review strategy</p> <p>4.7 Present a documented report containing data, analysis, recommendations and implementation program to client</p>

Required Skills and Knowledge

Refer to Evidence Guide

Evidence Guide

EVIDENCE GUIDE

Critical aspects of competency

- Identify different waste/material types.
- Visually estimate waste volumes.
- Understanding of material flows and organisational processes.

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.

- Possible benefits and outcomes from conducting a waste assessment
- Visual assessment procedures.
- Available reprocessing options.
- Waste types.
- Waste streams and characteristics.
- Material densities.
- Sampling techniques.
- Recording techniques.
- Company requirements.
- Potential risks and hazards.
- Emergency response procedures.
- Occupational health and safety requirements.
- Duty of care in provision of services.
- Relevant industry standards and codes.
- Relevant legislation.
- Relevant environmental regulations.

Specific skills needed to achieve the performance criteria

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

- oral communication skills including questioning, listening, following instructions
- visual quantity estimates
- reading and interpreting skills
- written communication skills for documentation and report writing
- methodical organisation of work
- identification of waste types
- using photographic equipment
- accuracy and attention to detail
- computer skills
- estimating
- hazard identification
- use of emergency and personal protective equipment
- safe and efficient work practices.

Other units of competency that could be assessed with this unit

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

- PRMWM04B Develop waste management strategies
- PRMWM05B Identify and segregate waste
- PRMCMN201A Participate in workplace safety arrangements.

Resources required to assess this unit

The following resources should be available:

- MSDS
- client waste profile
- market opportunities.

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 relevant environment and by carrying out a waste assessment under normal industry operating conditions. 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 development of waste management strategies.

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 and written questions, 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, environmental and other regulations e.g. health 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.

- | | | |
|------------------------------|---|---|
| 1 Perform the process | 2 Perform and administer the process | 3 Perform, administer and design the process |
|------------------------------|---|---|

How can communication of ideas and information be applied?	2	Discuss assessment plans with clients and colleagues. Discuss alternative options with contractors, re-processors and other stakeholders, such as environmental protection agencies.
How can information be collected, analysed and organised ?	3	Gather, analyse and organise information from a number of sources (including regulatory sources, client organisation, relevant personnel and company specifications).
How are activities planned and organised ?	3	Prepare detailed action plan and methodology for the waste assessment. Clearly define responsibilities.
How can teamwork be applied?	2	Discuss the process and activities with on-site client personnel and colleagues.
How can the use of mathematical ideas and techniques be applied?	3	Analyse the waste assessment data and conduct data validation processes and extrapolations of the data.
How can problem-solving skills be applied?	2	Apply problem-solving skills during planning and conduct of the waste assessment to overcome operational and site constraints and ensure objectives are met. If necessary, develop alternative strategies for resource recovery together with implementation programs.
How can the use of technology be applied?	1	Manage and analyse data and demonstrate understanding of technology and its capability to meet resource recovery objectives.

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.

Benefits of process may include but are not limited to:

- compliance with legislative and corporate requirements
- cost reductions
- improved product quality
- improvements in workplace safety
- reductions in waste.

Client includes all forms of business enterprises in this context including government agencies and private and public companies.

Emergency and personal protective equipment may include:

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

Emergency and personal protective equipment may also include:

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

Limitations of the process may include but are not limited to:

- historical data and other relevant information
- results are volume-based
- timeframe in which waste assessment occurs
- type of containment may hinder ability to identify all waste issues
- visual assessment does not provide exact data on waste stream.

Measurement of waste may include:

- number
- proportion/percentage
- review of documentation such as EPA transport certificates, contractor contracts and invoices, and corporate procedures and records
- volume.

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

- Australian Standards
- industry standards, codes of practice and associated publications
- manufacturers' specifications
- organisational procedures
- relevant state/territory legislation, policies and regulations.

Potential risks and hazards include but are not limited to:

- dust
- fire
- gases and fumes

- hazardous waste (e.g. sharps and chemicals)
- inadequately contained waste
- maintenance activities
- processing plant
- site vehicles and equipment
- weather.

Resource management includes the following processes:

- waste avoidance, re-use, recycling, energy recovery, composting
- those that could occur on or off site.

Resources may include:

- camera
- clean-up/decontamination equipment
- personnel
- personal protective equipment (PPE)
- recording equipment
- reference manuals
- safety barriers and warning signs.

Site may include:

- any other site where business activities occur
- business premises
- landfill site
- plant/factory
- resource recovery facility
- waste processing plant.

Site review may involve but is not limited to:

- constraints to further segregation of waste
- discussions with employees about waste management
- review of placement, size and design of waste containers
- review of production process and flow of materials through the site.

Variables impacting on the waste may include but are not limited to:

- maintenance downtime
- product changeovers
- production flows
- quality control procedures
- seasonal activity variations
- shift times
- start-up processes
- waste collection routines
- waste collection systems.

Waste assessment objectives may include but are not limited to:

- compliance with company or legislative requirement
- determining components of a resource recovery implementation program
- determining waste profile including type and quantity of waste

- establishment of resource recovery goals and targets
- identifying barriers to implementation of opportunities
- identifying cost of waste and cost reduction opportunities
- identifying improvements in management of waste on site
- identifying opportunities to reduce or divert waste from landfill.

Waste streams refers to solid waste only and may include:

- general waste stream
- other resource recovery streams
- prescribed waste stream (i.e. legislative wastes)
- recycling streams
- reprocessed (on-site) material stream
- re-used product stream.
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Unit Sector(s)

Not Applicable