

Australian Government

Department of Education, Employment and Workplace Relations

# **CPPWMT4053A Conduct and monitor waste management operations**

Release: 1



#### **CPPWMT4053A** Conduct and monitor waste management operations

#### **Modification History**

Revised unit

Unit updated and equivalent to PRMWM53A Conduct and monitor waste management operation

# **Unit Descriptor**

This unit of competency specifies the outcomes required to conduct and monitor waste management operations. It requires the ability to apply safe work practices while working with potentially hazardous waste products and to supervise a field team.

# **Application of the Unit**

This unit of competency supports individuals with responsibilities for organising waste management operations, leading a team or supervising a site. It includes contributing to the implementation of developed strategies, systems and plans, as well as recognising the need for expert advice.

## **Licensing/Regulatory Information**

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement.

# **Pre-Requisites**

Not applicable.

## **Employability Skills Information**

This unit contains employability skills.

#### **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.

#### **Elements and Performance Criteria**

1	Commence work operations.	1.1	Waste management <i>work site specification</i> or <i>organisational plan</i> is reviewed to identify work allocation requirements according to <i>organisational requirements</i> .
		1.2	<i>Potential hazards and risks</i> and anticipated occupational health and safety (OHS) procedures are identified and reported to appropriate person.
		1.3	Client needs and expectations are confirmed.
		1.4	Appropriate personnel are informed of work requirements and safe operating procedures.
		1.5	Work operations are conducted according to organisational requirements and <i>legislation and codes</i> .
		1.6	<i>Supervisory processes</i> and checks and measures are implemented to ensure work is completed within <i>time available</i> .
2	Monitor work activity to meet specifications.	2.1	Work activity is monitored systematically to ensure legislation, industry standards, OHS regulations and procedures, and organisational requirements are met.
		2.2	Follow-up on difficult or known problem areas pertaining to <i>plant</i> , <i>equipment</i> , <i>material</i> and work processes is executed.
		2.3	Work is reallocated as required to ensure client and organisational requirements are met safely and effectively.

3	Monitor daily operations.	3.1	Site operations are monitored to ensure individuals have the <i>competency level</i> and are equipped with <i>emergency</i> <i>and personal protective equipment</i> (PPE) according to organisational requirements, industry standards and OHS regulations.
		3.2	Site operations are monitored to ensure <i>site safety plan</i> is followed and <i>emergency response actions or procedures</i> are in place to ensure efficiency and effectiveness of waste management.
		3.3	In instances of wet weather, a wet weather receival area is organised and prepared according to organisational requirements and legislation and codes.
		3.4	<i>Work requirements are communicated</i> to personnel in a manner suitable to the situation to ensure instructions are understood, verified and confirmed.
4	Direct site development.	4.1	Landfill development plan is reviewed to determine site development requirements.
		4.2	Landfill and surrounding site is developed according to development plan, organisational requirements and legislation and codes.
5	Conduct housekeeping.	5.1	Processes are put in place for cleaning and shut-down procedures on completion of operation according to organisational organisations.
		5.2	<i>Record</i> of waste management activity is completed according to organisational requirements.

# **Required Skills and Knowledge**

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

#### **Required skills**

- analytical skills to:
  - determine appropriate waste management service
  - observe review operations
  - segregate valuable resources in waste
- interpersonal skills to:
  - provide guidance
  - work in a team environment in a range of waste management activities
- literacy skills to:
  - report on waste management activity
  - complete documentation
  - read and interpret:
    - technical plans
    - drawings
    - documents
    - work requirements and material safety data sheets (MSDS)
- self-management skills to:
  - conduct work practices safely and efficiently
  - apply accuracy and attention to detail
  - identify hazards and risks
  - organise work methodically
  - use applicable information technology
  - use emergency and PPE
  - work in confined spaces
- oral communication skills to:
  - ask questions
  - listen actively
  - undertake consultation
  - follow instructions
  - negotiate
  - provide information
- planning and initiative skills to supervise teams, including:
  - providing guidance
  - demonstrating functions associated with equipment processes
  - planning and problem solving in tasks
  - determining and allocating work requirements

- problem-solving skills to:
  - follow up on difficult or known problem areas or work processes
  - determine safe and effective solutions to client and organisational requirements and allocate work accordingly

#### **Required knowledge**

- environmental management relating to:
  - techniques to minimise erosion
  - waste types, streams and characteristics
  - waste covering requirements and considerations
  - industry standards
- identification of:
  - unanticipated waste
  - waste processing techniques
  - waste contaminants
  - waste non-conformances
  - waste disposal and recovery routes
  - waste processing plant types
  - basic biology and chemistry relating to recoverable resources
  - standard maintenance requirements
- OHS requirements relating to:
  - dangerous goods and hazardous substances
  - OHS hierarchy of control
  - potential hazards and risks to waste management operation
  - emergency response procedures
  - HAZAN and HAZOPS requirements
- plant, equipment and materials to facilitate:
  - operation of tools, plant and equipment
  - cleaning and maintenance of plant and equipment
  - plant shut-down, lock-out and isolation procedures
- principles of supervision, including:
  - leading by example
  - providing or organising training
  - establishing work plans
  - monitoring work activity and team outputs
  - establishing effective communication channels
- resource recovery options relating to:
  - valuable resources within materials
  - potential resources to be recovered
- regulations and standards affecting:

- establishing plant
- equipment and materials used in the waste management industry
- providing or organising training
- range of waste management services, including:
  - organisational and client requirements, including confidentiality requirements
  - reporting requirements
  - business methods and operations
  - industry standards
  - daily operations at a waste site
  - proprietary issues
  - waste management options
  - waste management hierarchy
  - landfill site development plan
  - duty of care

# **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	This unit of competency could be assessed by observation of practical demonstration or in discussion, relaying how to conduct and monitor waste management operations.
Critical aspects for assessment and evidence required to demonstrate	A person who demonstrates competency in this unit must be able to provide evidence of the required skills and knowledge specified in this unit.
competency in this unit	In particular the person should demonstrate the ability to:
	<ul> <li>coordinate activity and monitor a team or work operation, including allocating work and activities to personnel</li> <li>organise equipment and personnel requirements ansura safety and afficiency of operations.</li> </ul>
	ensure safety and efficiency of operations.
Context of and specific resources for assessment	Assessment of essential underpinning knowledge may be conducted in an off-site context. It is to comply with relevant regulatory or Australian standards' requirements.
	Resource implications for assessment include:
	<ul><li>work plans and approved specifications</li><li>forms and procedures manuals.</li></ul>
Method of assessment	Waste management operations must be conducted and monitored in line with industry expectations in the particular client environment. If the environment is narrowly defined or is not representative of industry needs, it may be necessary to refer to portfolio case studies to assess competency in conducting and monitoring waste management operations.
	Assessment methods must:
	satisfy the endorsed Assessment Guidelines of the Property Services Training Package
	• include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
	• reinforce the integration of employability skills with workplace tasks and job roles
	• confirm that competency is verified and able to be transferred to other circumstances and environments.
Guidance information for assessment	Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to

	odified equipment and other physical resources, and the provision appropriate assessment support.
ta	ssessment processes and techniques should as far as is practical ke into account the language, literacy and numeracy capacity of e candidate in relation to the competency being assessed.
	his unit could be assessed on its own or in combination with other hits of competency relevant to the job function, for example:
•	CPPCMN4002B Implement and monitor environmentally sustainable work practices
•	CPPWMT4030A Determine waste management services
•	CPPWMT4052A Organise waste management operations
•	CPPWMT4053A Conduct and monitor waste management operations
•	CPPWMT5004A Develop waste management strategies.

•

#### **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.

<i>Work site specification</i> may include:	<ul> <li>covering batters</li> <li>landfill site placement and compaction requirements</li> <li>production estimates and schedules</li> <li>sampling and testing</li> <li>support function requirements</li> <li>waste receival schedule</li> <li>waste transportation requirements.</li> </ul>
<i>Organisational plan</i> may include:	<ul> <li>implementation strategies, including:</li> <li>MSDS</li> <li>measurement and recording</li> <li>OHS procedures</li> <li>PPE</li> <li>legislation and codes</li> <li>site contract requirements</li> <li>work procedures</li> <li>objectives pertaining to:</li> <li>changes to processes and procedures</li> </ul>

	environmental issues
	education and training
	past and future reviews and audits
	recycling requirements
	reduction of waste
	review strategies, including:
	• internal and external audits
	monitoring statistics
	• monitoring personnel performance following training
	undertaking quality control checks
	• reviewing effectiveness of new procedures and processes
	• formalising review strategies via re-planning
	• sampling
	counting waste
	• targets, such as:
	carbon emissions reduction
	lean management
	recycling rates
	• waste minimisation.
Onequisational	briefing papers
Organisational requirements may include	• job sheets
information found in:	• letters
	• memos
	operations manuals
	policy and procedures documents
	quality assurance documents
	site development plans
	tender and contract documents
	training materials
	verbal or written instructions
	work procedures.
Potential hazards and	damage to plant, vehicle or property
risks are those identified	harm to the environment
by the organisation that	• illness or injury to employees, contractors or the public
may lead to:	• injuries resulting from manual handling and repetitive work.
Hazards and risks may	broken glass
include:	broken metal
	compaction equipment
	contamination
	• dust

	• fire
	• •
	overhanging signs     projectiles
	projectiles     aparla producing aquinment
	spark-producing equipment
	unguarded conveyor belts
	• weather.
Client needs and	briefing papers
expectations may be	contract documents
expressed in:	• letters
	• memos
	quality assurance documents
	tender documents
	• verbal or written instructions
	work specifications.
Appropriate personnel	• foreperson
may include:	maintenance technician
may monute.	• plant operator
	• supervisor
	waste transporter
	weighbridge officer.
Safe operating	awareness of contamination sources
procedures may include:	awareness of fire hazards
	confined spaces procedures
	• compliance with handling, transport and storage requirements of
	dangerous goods and hazardous substances
	emergency procedures, including emergency shut-down
	procedures
	• first aid
	following MSDS
	recognising hazards
	observing right of way in incline and decline
	observing speed limits
	operating equipment, plant and machinery according to     manufacturer specifications
	safe handling of waste
	• wearing seatbelts
	• working safely around other personnel
	• working safely around tools, plant and equipment.

Safe operating procedures must result in:	<ul><li>containment of waste</li><li>clean and undamaged emergency and PPE.</li></ul>
<i>Legislation and codes</i> may include:	<ul> <li>codes, including:</li> <li>Australian Code for the Transport of Dangerous Goods by Road and Rail</li> <li>industry</li> <li>commonwealth, state and territory legislation, including: <ul> <li>anti-discrimination</li> <li>environmental protection</li> <li>equal employment opportunity</li> <li>freedom of information</li> <li>industrial</li> <li>OHS</li> <li>trade practices</li> </ul> </li> </ul>
<i>Supervisory processes</i> may include:	<ul> <li>delegating</li> <li>implementing</li> <li>monitoring</li> <li>overseeing</li> <li>planning</li> <li>reviewing</li> <li>targeting practices to meet deadlines.</li> </ul>
<i>Time available</i> may include considering:	<ul> <li>client instructions</li> <li>contingencies</li> <li>past experiences</li> <li>skills and experience of operatives</li> <li>location of project</li> <li>methods to be employed</li> <li>resources and equipment to be used.</li> </ul>
<i>Plant</i> may include:	<ul> <li>autoclave</li> <li>balers</li> <li>boilers</li> <li>bunded areas</li> <li>centrifuge</li> <li>chippers</li> <li>combustion</li> <li>compactors</li> <li>composters</li> <li>computer hardware and software</li> <li>conveyors</li> </ul>

	• crushers
	<ul> <li>hammer mills</li> </ul>
	<ul> <li>incinerator</li> </ul>
	<ul> <li>materials recovery facility</li> </ul>
	<ul> <li>materials recovery facility</li> <li>microwave</li> </ul>
	• pipes
	• processing plants, including size-reduction processing plant
	safety structures and controls
	separators
	• shredders
	• sorters
	• storage tanks
	transfer station
	• treatment plants, including:
	biological treatment plant
	chemical treatment plant
	liquid waste treatment plant
	microwave treatment plant
	physical treatment plant
	treatment tanks
	• tub grinders.
<i>Equipment</i> may include:	barriers and warning signs
	compactors
	computer and associated hardware and software
	• conveyors
	• dozers
	earthmoving equipment
	• forklifts
	generators
	• hoses
	lawnmowers
	lifting equipment
	loadshifting equipment
	• pumps
	<ul> <li>safety barriers and signage</li> </ul>
	• sampling equipment
	• scales
	• scrapers
	• skips
	<ul> <li>sorting tables</li> </ul>
	storage containers

	• tractors
	• trucks:
	articulated
	• rigid
	• vacuums
	• waste containers
	• weighbridge.
Materials may include:	cell cover materials
	cleaning fluids
	cleaning rags
	• fertiliser
	• fuel
	• fuses
	• globes
	• gravel for wet weather tipping areas
	• lawn seed
	lubricants
	• oil
	• pesticides
	plant protection covers
	• plants
	<ul> <li>road repairing materials:</li> </ul>
	compacted materials
	• dirt
	• gravel
	• sand
	• water.
Competence level may be	demonstration of work skill
<i>Competency level</i> may be determined from:	discussion
	observation
	• procedural guides to determine skill gaps
	<ul> <li>training records.</li> </ul>
<b>F</b>	• footwear
<i>Emergency and personal protective equipment</i>	<ul> <li>communications equipment</li> </ul>
must include:	<ul> <li>eye protection, such as goggles and protective glasses</li> </ul>
	<ul> <li>eye protection, such as goggles and protective glasses</li> <li>eyewash kit</li> </ul>
	<ul> <li>fire extinguishers</li> </ul>
	<ul> <li>first aid kit</li> </ul>
	<ul><li>footwear</li></ul>
	• gloves
	<ul> <li>overalls and protective clothing.</li> </ul>
	- o, cruito una protoca, o crotining.

Emergency and personal	breathing apparatus
protective equipment	• emergency procedure guides
could also include:	• face shields or masks
	hard hats
	hearing protection
	• MSDS
	• spill kit.
<i>Personal protective equipment</i> must be:	<ul> <li>cleaned and fitted according to organisational requirements, manufacturer specifications and OHS requirements</li> </ul>
equipment must be.	• worn when required according to organisational requirements
	• stored according to organisational requirements.
Site safety plan may	dangerous and prohibited areas
include:	evacuation areas
	firefighting equipment
	• first aid
	emergency and PPE
	• shelter.
Emergency response	cleaning up
action or procedures may	containing emergency
include:	<ul> <li>isolating or shutting down equipment or plant</li> </ul>
	evacuation
	• first aid
	identifying emergency
	making site safe
	notifying authorities
	• using PPE.
Communication of work	mobile phones
<i>requirements</i> may be by:	other telecommunication
	two-way radios
	verbal or written instructions
	• written job sheets.
<i>Record</i> may include:	checks completed
	defects identified
	• faults serviced
	housekeeping undertaken
	materials used
	parts replaced
	repairs and adjustments made.

# **Unit Sector(s)**

Waste management

# **Custom Content Section**

Not applicable.