



Australian Government

Department of Education, Employment and Workplace Relations

CPPWMT4062A Apply waste avoidance techniques

Release: 1

CPPWMT4062A Apply waste avoidance techniques

Modification History

Revised unit

Unit updated and equivalent to PRMWM62A Apply waste avoidance techniques

Unit Descriptor

This unit of competency specifies the outcomes required to apply waste avoidance techniques. It requires the ability to identify the opportunities to apply environmentally friendly practices and resource management hierarchy.

Application of the Unit

This unit of competency supports individuals with responsibilities for investigating opportunities for waste avoidance and improved environmental practices. 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

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| 1 | Identify waste drivers. | 1.1 | Main <i>waste types</i> and <i>waste streams</i> within <i>workplace</i> are identified. |
| | | 1.2 | Cause or <i>waste driver</i> is identified. |
| 2 | Identify opportunities to avoid waste at source or reduce the quantity of waste generated. | 2.1 | Waste driver and <i>environmental and energy efficiency policies and procedures</i> are discussed with <i>interested parties</i> to determine possible alternative processes, products or practices. |
| | | 2.2 | Suppliers and customers are asked for feedback on the impacts of waste. |
| | | 2.3 | List of actions or alternatives to avoid unnecessary <i>energy consumption</i> , as well as to avoid waste identified, is developed. |
| | | 2.4 | Resource management hierarchy is applied in the evaluation of alternatives. |
| | | 2.5 | <i>Waste avoidance options</i> are discussed with <i>internal support personnel</i> . |
| | | 2.6 | Waste avoidance options are checked to ensure they comply with corporate regulations and policies, and <i>legislation and codes</i> . |
| 3 | Evaluate identified options. | 3.1 | Waste avoidance options are <i>prioritised</i> in order of greatest waste avoidance potential and most appropriate <i>environmental energy efficiency methods</i> . |
| | | 3.2 | Cost-benefit and feasibility analyses of waste avoidance options are undertaken. |
| | | 3.3 | Waste avoidance options are examined to determine associated decreased environmental use. |
| | | 3.4 | Resources or other issues associated with implementation of waste avoidance options are determined. |
| | | 3.5 | Findings from waste avoidance review, including cost-benefit analysis, are submitted for approval. |

Required Skills and Knowledge

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

Required skills

- analytical skills to:
 - research waste avoidance and energy efficiency options
 - conduct feasibility investigation
- reading skills to interpret:
 - technical plans
 - drawings
 - documents
 - material safety data sheets (MSDS)
- problem-solving skills to:
 - identify hazards and risks
 - decrease waste
- self-management skills to:
 - organise work methodically
 - use information technology to complete tasks
 - use emergency and personal protective equipment (PPE)
- oral communication skills to:
 - ask questions
 - listen effectively
 - consult with stakeholders
 - provide guidance
 - follow instructions
 - present information
 - negotiate alternative waste avoidance options
- critical thinking skills to conduct waste assessment, identifying:
 - resource needs
 - hazards and risks
- written communication skills for:
 - report writing
 - record keeping
 - documentation

Required knowledge

- environmental issues relating to:

- life cycle of products: re-new, re-use and recycle
- environmental regulations
- renewable energy
- energy efficiency systems
- identification of:
 - waste types, streams and characteristics
 - waste non-conformances
 - unanticipated waste
 - waste non-conformance procedures
 - waste containment
 - hazardous waste
- occupational health and safety (OHS) requirements relating to:
 - dangerous goods and hazardous substances
 - OHS hierarchy of control
- resource recovery options relating to:
 - valuable resources within materials
 - potential resources to be recovered
- waste avoidance options, including:
 - use renewable, recovered and recycled material
 - use materials with low energy consumption and low emissions to air and water during pre-production and production changes in product or process
 - reduce need for use of maintenance products and consumption of consumables
 - restrict use of dangerous substances in production process, as well as in product itself
 - specify packaging for products, minimising excessive packaging
 - encourage lean production
- waste management provision, including:
 - daily operations
 - duty of care
 - legislation, regulations and codes of practice applicable to specific waste management functions
 - organisational pricing schedules
 - organisational requirements and structure, including workplace communication channels and procedures
 - product safety and integrity requirements
 - waste management hierarchy
 - waste management options
- waste treatment options, including:
 - recycling
 - waste to landfill
 - waste water treatment

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 in the workplace or in a simulated environment of applying waste avoidance techniques.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>A person who demonstrates competency in this unit must be able to provide evidence of the required skills and knowledge specified in this unit.</p> <p>In particular the person should demonstrate the ability to:</p> <ul style="list-style-type: none"> • identify waste stream and materials • evaluate energy efficiency issues • develop alternative waste avoidance methods to treat waste, while complying with OHS requirements.
Context of and specific resources for assessment	<p>Assessment of essential underpinning knowledge may be conducted in an off-site context. It is to comply with relevant regulatory or Australian standards' requirements.</p> <p>Resource implications for assessment include:</p> <ul style="list-style-type: none"> • work plans and approved specifications • forms and procedures manuals.
Method of assessment	<p>Waste avoidance techniques must comply 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 waste avoidance.</p> <p>Assessment methods must:</p> <ul style="list-style-type: none"> • 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 modified equipment and other physical resources, and the provision

	<p>of appropriate assessment support.</p> <p>Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.</p> <p>This unit could be assessed on its own or in combination with other units of competency relevant to the job function, for example:</p> <ul style="list-style-type: none">• CPPCMN4002B Implement and monitor environmentally sustainable work practices• CPPWMT4030A Determine waste management services• CPPWMT4052A Organise waste management operations• CPPWMT4060A Apply lean management techniques• CPPWMT5004A Develop waste management strategies• CPPWMT5036A Develop waste management plans• CPPWMT5058A Develop emergency response plans.
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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>Waste types</i> may include:	<ul style="list-style-type: none"> • 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.
<i>Waste streams</i> may include:	<ul style="list-style-type: none"> • chemical waste • construction and demolition • dangerous goods • green waste • hazardous substances • municipal waste • prescribed waste • putrescibles • quarantine • recyclable liquids • regulated waste • solid inert.
<i>Workplace</i> may include:	<ul style="list-style-type: none"> • business premises • factory • plant • resource recovery facility • site where business activity occurs.
<i>Waste drivers</i> may include:	<ul style="list-style-type: none"> • customer requirements • employee attitudes and awareness • employee work practices • excess packaging • inappropriate machinery, tooling and work area • lack of suitable systems • poorly maintained machinery • quality of raw materials.
<i>Environmental and energy efficiency policies and procedures</i> may include:	<ul style="list-style-type: none"> • delivering policies and procedures via: <ul style="list-style-type: none"> • consultancies • internal resources • service providers • determining organisation's most appropriate waste treatment

	<ul style="list-style-type: none"> • initiating or maintaining organisational procedures for: <ul style="list-style-type: none"> • material usage • operational energy consumption • waste to landfill • initiating or maintaining organisational policy for energy efficiency and environmental initiative, including: <ul style="list-style-type: none"> • action plans • audits • environmental management systems • surveys • developing energy use and waste management options to reduce energy consumption and improve waste management • monitoring energy usage and waste treatment via: <ul style="list-style-type: none"> • progress reports on energy use and waste treatment • key performance indicators (KPIs) that measure energy consumption and waste minimisation achievements.
<p><i>Interested parties</i> may include:</p>	<ul style="list-style-type: none"> • clients • customers • employees, including: <ul style="list-style-type: none"> • contractors, including: <ul style="list-style-type: none"> • quality assessors • safety and maintenance assessors • legislators • machine manufacturers • related businesses • suppliers • technology suppliers • waste and recycling contractors • direct staff • purchasing officers.
<p><i>Energy consumption</i> may include:</p>	<ul style="list-style-type: none"> • non-stationary (transport) • stationary (plant equipment).
<p><i>Waste avoidance options</i> may include:</p>	<ul style="list-style-type: none"> • changes in product or process • correct application of work procedures • customer standards on acceptable levels of waste • employee training and competence • handling and storage practices • housekeeping • machine suitability • material specification:

	<ul style="list-style-type: none"> • portion control • quality • quantity • product packaging • purchasing practices • quality of materials supplied • quality standards • technology improvements.
<i>Internal support personnel</i> may include:	<ul style="list-style-type: none"> • engineering • OHS • purchasing • quality assurance • sales and marketing.
<i>Legislation and codes</i> may include:	<ul style="list-style-type: none"> • codes, including: <ul style="list-style-type: none"> • Australian Code for the Transport of Dangerous Goods by Road and Rail • industry • commonwealth, state and territory legislation, including: <ul style="list-style-type: none"> • anti-discrimination • environmental protection • equal employment opportunity • freedom of information • industrial • OHS • trade practices • road laws.
<i>Prioritising</i> waste avoidance options may be based on:	<ul style="list-style-type: none"> • consultation with stakeholders • feasibility analysis • resource requirements.
<i>Environmental energy efficiency methods</i> may include:	<ul style="list-style-type: none"> • applying energy efficiency systems • changing processes: <ul style="list-style-type: none"> • mechanical cleaning • redesigning products and procedures so that materials can be used more efficiently • improving organisation's operational energy consumption • improving OHS and housekeeping, such as: <ul style="list-style-type: none"> • using a broom instead of a hose • using old rags for cleaning instead of toxic cleaners or water • preventing and minimising production of pollution, including: <ul style="list-style-type: none"> • discharges to air, land and water

	<ul style="list-style-type: none">• hazardous waste.
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Unit Sector(s)

Waste management

Custom Content Section

Not applicable.