



Australian Government

AURREA3002 Monitor environmental and sustainability best practice in the marine mechanical industry

Release 1

AURREA3002 Monitor environmental and sustainability best practice in the marine mechanical industry

Modification History

Release	Comment
Release 1	Replaces AURR371181A Implement and monitor environmental regulations in the marine repair industry Performance Criteria updated to reflect sustainability

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes required to monitor environmental regulations and sustainability best practice whilst undertaking the repair, maintenance and installation of marine craft engines and or components and electrical systems in a manner that ensures the protection of the environment in the marine repair industry. Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.
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Application of the Unit

Application of the unit	Work involves the theory, knowledge and application of skills related to environmental regulations and sustainability best practice in the marine repair industry.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	This unit contains employability skills.
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Apply and monitor environment regulations	1.1.Reasons for <i>ethical environmental practice</i> in an marine workplace are identified 1.2.Environmental responsibilities and penalties for individual breaches of legislation and regulations are identified 1.3.<i>Documents and procedures</i> relevant to environmental safety and <i>hazards</i> are applied 1.4.<i>Safety equipment and other material</i> necessary to support environmentally sound practices are identified and sourced
2. Monitor and avoid contamination to water systems and marine environments	2.1.Wastewater or <i>contaminants</i> are contained to restrict entry to water systems, foreshores or marine environments 2.2.Vessel and component maintenance, service and repair is undertaken in an environmentally responsible manner to avoid hazards to water systems, foreshores and marine environments 2.3.Engine and component cleaning is carried out in an area that is bunded or graded to a collection pit 2.4.All preparation areas, in particular anti-foulant paint preparation, is bunded and under cover to ensure accidental spillage cannot escape into water systems, foreshores and marine environments 2.5.All components containing environmentally hazardous material are stored undercover in a sealed and bunded area 2.6.Liquid wastes are drained into appropriate storage or recycling containers 2.7.Bilge water is disposed of in an appropriate manner 2.8.Spill kit is located and used as needed and disposed of as controlled waste by a licensed contractor to prevent water, foreshore pollution and damage to the marine environment 2.9.Spills are cleaned up immediately and the workplace is kept clean to prevent unintentional pollution to water, foreshores and the marine environment
3. Monitor and avoid hazards to air quality	3.1.Welding, soldering and thermal cutting is conducted in a well-ventilated area 3.2.Hazards of airborne particles are monitored, minimised and contained 3.3.Hazards of gases are identified, monitored and contained 3.4.Clean-up of guns and general tools and equipment is conducted in an environmentally safe manner
4. Monitor and avoid noise hazards	4.1.Hazardous noise activities are monitored, prevented, reduced and contained

	4.2. Hazardous noise activities are carried out within approved operating hours and regulations
5. Monitor and apply sustainability best practice	5.1. <i>Sustainability best practice</i> is monitored and applied to minimise waste and potential damage to the environment according to workplace policies and procedures 5.2. Methods to reduce resource consumption (water, electricity, fossil fuels, chemicals) are monitored and applied 5.3. Environmental damage and breaches of environmental regulations are monitored and recorded

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication skills to:
 - communicate ideas and information (verbal and written) relating to the monitoring of environmental regulations and sustainability best practice for a marine mechanical workplace
- initiative and enterprise to:
 - identify sources of information, assistance and expert knowledge to expand knowledge, skills and understanding
- literacy skills to:
 - interpret and monitor marine mechanical workplace environmental procedures
 - read and apply environmental regulations for a marine workplace
 - record environmental damage and breaches of environmental regulations
- numeracy skills to:
 - interpret instruments, gauges and other recording equipment
 - measure and calculate length, area and volume
- planning and organising skills to:
 - identify risk factors and actions to minimise risk
 - identify planning, checking and inspection techniques to avoid environmental contamination and wastage
- problem-solving skills to:
 - recognise a workplace problem or a potential problem
 - refer problems outside area of responsibility to appropriate person and suggest possible causes
 - identify processes which contribute to improvements for sustainability best practice
- self-management skills to:
 - identify appropriate safety and environmental response equipment, materials, processes and procedures
 - recognise limitations and seek timely advice
- teamwork skills to:
 - work with others and in a team by cooperating with team members
- technical skills to:
 - collect, organise and interpret technical information relating to recognising marine mechanical workplace situations that are potentially harmful to the environment
 - use and monitor spill kits, including kit reordering and disposal
- technology skills to:
 - use workplace environmental safety-related technology to assist with clean and safe work

REQUIRED SKILLS AND KNOWLEDGE

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

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Required knowledge

- aspects of environmental regulations and implications for work being undertaken in a marine workplace
- characteristics and potential environmental impact of products used in the repair, maintenance and installation of marine craft engines, components and electrical systems
- philosophy of prevention, reuse, reduce, recycle
- procedures for use of spill kit
- effects of pollution and methods to minimise it
- actions to be undertaken in case of significant environmental threat in a marine mechanical workplace
- monitoring and recording procedures for environmental damage and breaches of environmental regulations

Evidence Guide

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

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria and required skills and knowledge.

A person who demonstrates competency in this unit must be able to:

- monitor and apply environmental regulations and sustainability best practice as they apply in an marine mechanical workplace
- identify materials used in an marine mechanical workplace and assess their potential environmental impact
- monitor and record environmental damage and breaches to environmental regulations.

Context of and specific resources for assessment

Competency is to be assessed in the workplace or a simulated workplace environment that accurately reflects performance in a real workplace setting.

Assessment is to occur:

- using standard workplace practices and procedures
- following safety requirements
- applying environmental constraints.

Assessment is to comply with relevant:

- regulatory requirements
- Australian standards
- industry codes of practice.

The following resources must be made available for the assessment of this unit:

- access to environmental legislation, regulations and best practice models
- access to an marine workplace or simulated environment that accurately reflects marine workshop working conditions
- access to workplace documents and reference images
- access to personal protective and environmental protection equipment of the type intended to be used in response to an environmental incident or accident.

EVIDENCE GUIDE

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Overview of assessment

Method of assessment

Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.

Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with the application of required skills and knowledge.

Assessment methods must be by direct observation of tasks and include questioning on required skills and knowledge to ensure correct interpretation and application.

Competence in this unit may be assessed in conjunction with other units which together form part of a holistic work role.

Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate the needs of diverse clients.

Assessment processes and techniques must be culturally sensitive and appropriate to the language, literacy and numeracy capacity of the candidate and the work being performed.

Range Statement

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.

Ethical environmental practice may include:

- compliance with legislative obligations
- hazardous materials handling best practice applications
- organisation insurance requirements
- discretion, judgement and problem-solving skills in undertaking environmentally sound work practices

Documents and procedures may include:

- material safety data sheets (MSDS)
- hazardous substances register
- environmental legislation
- health regulations
- site environmental policy
- workplace environmental procedures and safety instructions
- dangerous goods code safe operating procedures

Hazards may include:

- toxic fumes and substances
- flammable materials and fire hazards
- spillages
- waste and debris especially on floors, ladders, trolleys
- electricity and water
- toxic substances
- damaged packing material or containers
- broken or damaged equipment
- unsafe lifting practices

Safety equipment and other material may include:

- personal protective equipment (PPE) including:
 - eye protection
 - hearing protection
 - gloves
 - other suitable protective clothing
 - safety footwear
- spill kit
- absorbent materials
- drip and catchment trays
- waste bags
- waste segregation systems

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Contaminants may include:

- solid or liquid wastes
- oil, fuel and grease
- hydrocarbon based degreasing agents and solvents
- acids
- alkaline wastes
- paint, lacquer, varnish
- glues and adhesive compounds
- household chemicals and pesticides

Sustainability best practice may include:

- recycling waste
- energy conservation practices
- natural resources (water, etc.) conservation practices
- reusing
- environmental (green) purchasing practices
- noise minimisation

Unit Sector(s)

Competency field	Marine
Unit sector	Environment

Custom Content Section

Not applicable.