



Australian Government

AURREA2001 Apply environmental and sustainability best practice in a marine workplace

Release 1

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Modification History

Release	Comment
Release 1	Replaces AURR271103A Apply environmental regulations in the marine service industry Performance Criteria updated to reflect sustainability

Unit Descriptor

Unit descriptor	<p>This unit describes the performance outcomes required to identify and apply environmental regulations and sustainability best practice to work safely and avoid potential environmental hazards in the maintenance and service of marine vessels.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.</p>
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Application of the Unit

Application of the unit	<p>Work involves the theory, knowledge and application of skills related to environmental regulations and sustainability best practice in a marine workplace while maintaining and servicing marine vessels.</p> <p>Work requires individuals to demonstrate discretion, judgement and problem-solving skills in undertaking environmentally sound work practices.</p>
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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. Identify and apply environment regulations	1.1.Reasons for <i>ethical environmental practice</i> in an marine mechanical 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 located and determined 1.4. <i>Safety equipment and other material</i> necessary to support environmentally sound practices are identified and sourced
2. Identify and avoid hazards to water, foreshores 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.Preparation areas are checked to ensure accidental spillage cannot escape into water systems, foreshores and marine environments 2.4.Spill kit is identified and located in preparation to prevent damage to the marine environment 2.5.Waste containment areas are identified and inspected to avoid contamination of the surrounding area
3. Identify and avoid hazards to air quality	3.1.Hazardous airborne particles, including anti-foulant are identified, minimised and contained 3.2.Hazardous gases and fumes are identified, minimised and contained 3.3.Clean-up of guns, general tools, equipment and spray and painting equipment is conducted in an environmentally safe manner
4. Identify and avoid noise hazards	4.1.Hazardous noise activities are identified, prevented, reduced and contained 4.2.Hazardous noise activities are carried out within approved operating hours and regulations
5. Identify and apply sustainability best practice	5.1. <i>Sustainability best practice</i> is identified 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 identified and applied 5.3.Environmental damage and breaches of environmental regulations are reported

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication skills to:
 - follow oral instructions
 - communicate verbal and written ideas and information as they relate to environmental regulations and sustainability best practice of 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:
 - identify and apply workplace environmental procedures
 - read and apply environmental regulations for a marine mechanical workplace
- numeracy skills to 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:
 - collaborate and cooperate with other team members relating to environmental and sustainability issues
- technical skills to:
 - collect, organise and interpret technical information relating to recognising workplace situations that are potentially harmful to the environment
 - use spill kits
- technology skills to:
 - use workplace environmental and safety-related technology to assist with clean and safe work practices

Required knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

- effects of pollution and methods to minimise it
- environmental regulations and their implications for work being undertaken in a marine mechanical service and repair workplace
- characteristics and potential environmental impact of products used in the maintenance, repair and service of marine vessels, components and electrical systems
- philosophy of prevention, reuse, reduce, recycle
- awareness of the environmental effects of chemicals and contaminants on the marine environment
- procedures for use of spill kit
- reporting procedures for environmental damage and breaches of environmental regulations

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>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.</p> <p>A person who demonstrates competency in this unit must be able to:</p> <ul style="list-style-type: none"> • apply environmental regulations and sustainability best practice in a marine mechanical service and repair workplace • identify materials used in an marine mechanical workplace and assess their potential environmental impact • use a spill kit • report environmental damage and breaches of environmental regulations.
Context of and specific resources for assessment	<p>Competency is to be assessed in the workplace or a simulated workplace environment that accurately reflects performance in a real workplace setting.</p> <p>Assessment is to occur:</p> <ul style="list-style-type: none"> • using standard workplace practices and procedures • following safety requirements • applying environmental constraints. <p>Assessment is to comply with relevant:</p> <ul style="list-style-type: none"> • regulatory requirements • Australian standards • industry codes of practice. <p>The following resources must be made available for the assessment of this unit:</p> <ul style="list-style-type: none"> • access to environmental legislation, regulations and best practice models including access to workplace documents and reference images • access to a marine maintenance and service workplace or simulated environment that accurately reflects workshop working conditions, including conditions for the removal and application of anti-foulants, recycling bins, liquid, sludge and

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Overview of assessment	
	<p>solid wastes</p> <ul style="list-style-type: none"> • access to PPE and other equipment of the type intended to be used in response to an environmental incident or accident.
Method of assessment	<p>Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.</p> <p>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.</p> <p>Assessment methods must be by direct observation of tasks and include questioning on required skills and knowledge to ensure correct interpretation and application.</p> <p>Competence in this unit may be assessed in conjunction with other units which together form part of an holistic work role.</p> <p>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate the needs of diverse clients.</p> <p>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.</p>

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.

<p><i>Ethical environmental practice</i> may include:</p>	<ul style="list-style-type: none"> • correct disposal methods for waste and cleaning and/or washing of internal and external surfaces, glass surfaces and wet areas • painting with anti-foulant based products • 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.
<p><i>Documents and procedures</i> may include:</p>	<ul style="list-style-type: none"> • material safety data sheets (MSDS) • environmental legislation • health regulations • hazardous substances register • site environmental policy • workplace environmental procedures and safety instructions • dangerous goods code safe operating procedures.
<p><i>Hazards</i> may include:</p>	<ul style="list-style-type: none"> • 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.
<p><i>Safety equipment and other material</i> may include:</p>	<ul style="list-style-type: none"> • personal protective equipment (PPE) including: <ul style="list-style-type: none"> • eye protection • hearing protection • gloves • other suitable protective clothing • safety footwear • spill kit • absorbent materials • drip and catchment trays

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	<ul style="list-style-type: none"> • waste bags • waste segregation systems
<i>Contaminants</i> may include:	<ul style="list-style-type: none"> • solid or liquid wastes • oil, fuel and grease • hydrocarbon based degreasing agents and solvents • acids • alkaline wastes • tributyltin, arsenic, mercury and DDT • paint, lacquer, varnish • anti-foulant based products • glues and adhesive compounds • household chemicals and pesticides.
<i>Sustainability best practice</i> may include:	<ul style="list-style-type: none"> • 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.