



Australian Government

Department of Education, Employment and Workplace Relations

AURR271103A Apply environmental regulations in the marine service industry

Release: 1

AURR271103A Apply environmental regulations in the marine service industry

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit of competency covers the competency required to apply environmental regulations and avoid potential hazards in the maintenance and service of marine vessels.
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Application of the Unit

Application of the unit	<p>Work involves the normal activities of a marine maintenance and service workshop.</p> <p>Competency may be demonstrated in workplaces involved in the maintenance and service of marine vessels, components and electrical systems and components and painting of marine vessels.</p> <p>Work is carried out in accordance with legislative obligations, environmental legislation, health regulations, manual handling procedures and organisation insurance requirements.</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

Prerequisite units		

Prerequisite units		

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 environment regulations	1.1.Reasons for ethical environmental practice in a marine maintenance and service workshop are identified 1.2.Environmental responsibilities of staff in a marine service workshop are identified 1.3.Penalties for individual breaches of the legislation are identified 1.4.Waste is minimised, and waste, including biological materials (marine biota), sludge and solid, are sorted and stored in appropriate bins for recycling or disposal 1.5.Packaging on goods received is sorted and disposed of appropriately
2. Identify and avoid hazards to stormwater, foreshores and marine environments	2.1.No wastewater or contaminants are allowed to enter stormwater systems, foreshores or marine environments 2.2.All vessel and component maintenance, service and repair is undertaken in an environmentally responsible manner to avoid hazards to stormwater systems, foreshores and marine environments 2.3.All preparation areas, in particular for anti-foulant paint preparation, are bunded and under cover to ensure accidental spillage cannot escape into stormwater systems, foreshores and marine environments 2.4.All components containing environmentally hazardous material are labelled and stored undercover in a sealed and bunded or drained area 2.5.All liquid wastes are drained into appropriate storage or recycling containers 2.6.Bilge water is disposed of in an appropriate manner 2.7.Spill kit is located and used as needed to prevent stormwater and foreshore pollution and damage to the marine environment 2.8.Spills are cleaned immediately and the workplace is kept clean to prevent unintentional stormwater and foreshore pollution and damage to the marine environment
3. Identify and avoid hazards to air quality	3.1.Hazards of airborne particles, including anti-foulant are identified, minimised and contained 3.2.Paint is mixed in a well-ventilated room 3.3.Abrasive sanding is undertaken in an area where waste is contained and collected to avoid

ELEMENT	PERFORMANCE CRITERIA
	<p>contamination of the surrounding area</p> <p>3.4. Fibre glassing is undertaken in an enclosed under cover area that is well ventilated</p> <p>3.5. Surface coating operations by spraying are carried out in a manner that does not cause environmental damage</p> <p>3.6. Welding and thermal cutting is conducted in a well ventilated area</p> <p>3.7. Hazards of gases and fumes are identified, minimised and contained</p> <p>3.8. Clean-up of guns, general tools, equipment and spray and/ or painting equipment is conducted in an environmentally safe manner</p>

ELEMENT	PERFORMANCE CRITERIA
4. Identify and avoid noise hazards	4.1.Noise generating activities are minimised and carried out within approved operating hours

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Required skills include:

- collect, organise and understand information related to environmental procedures from legislation, regulations, policies, guidelines and workplace practices in a marine maintenance and service workshop
- communicate ideas and information to ensure all work is undertaken in accordance with environmental best practice, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation of equipment and materials and the selection of an appropriate worksite to avoid environmental contamination, backtracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to minimise wastage, optimise workflow and productivity
- use planning, checking and inspection techniques to avoid environmental contamination and wastage
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements required for the work
- use the workplace technology related to environmental protection measures

Required knowledge

Required knowledge includes:

- aspects of environmental legislation and its implications to work being undertaken
- characteristics and potential environmental impact of products used in the maintenance, repair and service of marine vessels, components and electrical systems
- philosophy of prevent, reduce, reuse, recycle
- procedures for reporting machinery faults and material defects
- internal reporting procedures for significant environmental damage occurring in the workplace
- awareness of the environmental effects of tributyltin, arsenic, mercury and DDT on

REQUIRED SKILLS AND KNOWLEDGE

the marine environment

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

- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Apply environmental regulations and best practice
- Identify materials used in the maintenance, service and repair process and assess their environmental impact
- Follow work instructions, operating procedures and inspection processes to:
 - minimise the risk of injury to self and others
 - prevent damage and wastage of goods, equipment and products
 - maintain required production output and product quality
- Conduct operator maintenance on tools and equipment to ensure environmental efficiency
- Work effectively with others
- Modify activities to cater for variations in workplace context and environment
- Use of a spill kit.

Context of, and specific resources for assessment

- Assessment may occur on the job or in a workplace simulated facility with process equipment, materials, work instructions and deadlines
- Access to a marine maintenance and service workshop with access to marine vessels requiring servicing and maintenance of components and/or systems, including the removal and application of anti-foulants, recycling bins, liquid, sludge and solid wastes
- Resources may include, pressure washing and facilities for the use of recycled water.

Method of assessment

- Assessment methods must confirm consistency of performance over time and in a range of workplace contexts
- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and should be in conjunction with assessment of other units of

EVIDENCE GUIDE

	<p>competency</p> <ul style="list-style-type: none">• Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.
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EVIDENCE GUIDE**Guidance information for assessment****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.

Marine maintenance and service workshop

Marine maintenance and service workshop includes:

- service and maintenance of marine vessels

Work requirements

Work involves the normal activities of a marine maintenance and service workshop, including:

- the repair and service of deck, hull, cabin, equipment, and fittings, and water testing
- the disposal of waste and cleaning and/or washing of internal and external surfaces, glass surfaces and wet areas
- the welding and thermal cutting of marine components
- the removal and preparation of vessel surfaces and components for painting
- painting with anti-foulant based products

Occupational health and safety (OHS) requirements

OHS requirements include:

- legislation, safety management systems, hazardous substances and dangerous goods codes and safe operating procedures

Tools and equipment

Tools and equipment are to include:

- spill kits, recycling bins and drums, bunded wash bays, air extraction equipment, slipways and hardstand areas with pollution control measures and diversion valves, spray booth and/or chamber or other approved area and

RANGE STATEMENT	
	wastewater management system
Materials	Materials include: <ul style="list-style-type: none"> • material data safety sheets (MSDS)
Personal protective equipment	<ul style="list-style-type: none"> • Personal protective equipment is to include, that prescribed under legislation, regulations and enterprise policies and practices • Face masks are available for rubbing back and painting
Information and procedures	Information and procedures may include: <ul style="list-style-type: none"> • environmental legislation, regulations and advice • workplace procedures relating to the use of tools and equipment • work instructions, including job sheets and/or cards • workplace procedures relating to reporting and communication of environmental issues • manufacturer and/or component supplier specifications and operational procedures • site environmental policy • MSDS

Unit Sector(s)

Unit sector	Recreational boating
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Co-requisite units

Co-requisite units	

Competency field

Competency field	
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