



Australian Government

Department of Education, Employment and Workplace Relations

SFISHIP211C Prepare for maintenance

Release: 1

SFISHIP211C Prepare for maintenance

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	<p>This unit of competency involves preparing resources and the work area for maintenance using safe and environmentally responsible methods.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
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Application of the Unit

Application of the unit	<p>This unit has application to aquaculture, fishing operations and fisheries compliance where use is made of small vessels and a maritime regulatory certification is not required. For advice on certifications refer to the current TDM07 Maritime Training Package.</p> <p>The competency involves the maintenance of marine mechanical plant and systems, including auxiliary machinery, propulsion plant and service systems, such as LPG and fire hoses including associated pipework and fittings.</p> <p>All enterprise or workplace procedures and activities are carried out according to <i>relevant government regulations, licensing and other compliance requirements</i>, including <i>occupational health and safety (OHS) guidelines</i> and <i>ecologically sustainable development (ESD) principles</i>.</p> <p>Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer instructions. Appropriate <i>personal protective equipment (PPE)</i> is selected, checked, used and maintained.</p>
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

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. Select and prepare resources	1.1. Materials correspond to the quantity and type as stated in work instruction or standard operating procedures (SOPs). 1.2. Equipment selected is serviceable and of the type and quantity required to carry out the specific task. 1.3. Any restrictions and variances to resources that may impede maintenance progress or require contingency or emergency response are accurately reported to supervisor 1.4. Material and equipment are handled, stored and secured.
2. Identify and <i>prepare the work area</i>	2.1. Work area, machinery and equipment are confirmed as being safe for work to proceed. 2.2. Work area is appropriate to the <i>operational requirements</i> of the work instruction. 2.3. Work area is accessible and free from obstruction for receiving and storing materials and resources needed for the work to proceed. 2.4. Specifications, containment strategies, plans, materials and equipment are available at the workplace according to schedule and enterprise requirements.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
<ul style="list-style-type: none"> • communicating with supervisor on materials and equipment, safety, emergency procedures and work instructions • carrying out maintenance of: <ul style="list-style-type: none"> • life saving and fire fighting appliances • steel work, both cleaning and preparation for, and application of, protective coatings • wires and ropes • jointing

REQUIRED SKILLS AND KNOWLEDGE

- lubricating
- obtaining and preparing consumables for work, including:
 - cleaning fluids and chemicals
 - greases
 - jointing materials
 - life saving and fire fighting appliances spares
 - oils
 - packing materials
 - paints
 - solvents
- packing
- preparing access and safety equipment, including:
 - bosuns' chairs
 - erection of hazard warnings, barriers and safety equipment
 - isolation of machinery, equipment and systems
 - positioning of contingency equipment
 - scaffolding and ladders
 - staging
- preparing equipment for work, including:
 - airless and air spray painting equipment
 - PPE
 - shot blasting equipment
 - water and chemical washing equipment
- preparing storage requirements for:
 - dismantled equipment and machinery necessary to progress work
 - tools, equipment and consumables during maintenance
- safely preparing electrically or pneumatically operated power tools, including:
 - high pressure equipment
 - mechanical scaling equipment
 - pistol drills
 - rotary grinders
- selecting and preparing hand tools, including:
 - chisels and nut splitters
 - files
 - hacksaws
 - packing knives and extractors
 - pliers
 - scrapers and other abrasive materials

REQUIRED SKILLS AND KNOWLEDGE

- screw drivers
- spanners
- tinsnips and guillotine
- wad punches
- woodworking tools.

Literacy skills used for:

- interpreting manufacturer technical information relating to maintenance requirements of equipment
- interpreting statutory regulations, such as for safety and environmental hazards and controls.

Numeracy skills used for:

- reading and recording operating parameters.

Required knowledge

- government regulatory requirements and enterprise safety at work rules and regulations as they apply on board vessels, including:
 - code of safe working practices
 - entry into confined spaces
 - environmental protection
 - good vessel keeping practices
 - guarding of machinery
 - isolating systems
 - lifting equipment
 - marine safety regulations
 - PPE
 - safe movement onboard ship
- hazards and the precautions necessary to minimise risk associated with:
 - the work area, including consumables, the environment, and tools and maintenance equipment
 - preparing resources for maintenance
 - maintenance work
- preferred resources, their availability and acceptable alternatives.

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 evidence required to demonstrate competence in this unit	<p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> • prepare resources and the work area to carry out maintenance on the vessel and its equipment • prepare materials for work • prepare equipment for maintenance • prepare the equipment and/or area to be worked on to a suitable condition to commence maintenance • store resources and dismantled machinery and systems in the work area. <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> • handling of resources • procedures to apply when resources vary from requirements • strategies to minimise safety and environmental risks.
Context of and specific resources for assessment	<p>Assessment is to be conducted at the workplace or in a simulated work environment.</p> <p>Resources may include:</p> <ul style="list-style-type: none"> • maintenance tools and equipment • operation procedures and policies • operational machinery and equipment • safety equipment • service equipment and maintenance instructions • spares and consumables.
Method of assessment	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> • observation of practical demonstration • practical exercises • project work • written or oral short-answer testing.
Guidance information for	This unit may be assessed with SFISHIP205C Maintain

EVIDENCE GUIDE**assessment**

marine plant, or holistically with other units in a qualification.

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.

Relevant government regulations, licensing and other compliance requirements may include:

- business or workplace operations, policies and practices
- ESD principles, environmental hazard identification, risk assessment and control
- OHS hazard identification, risk assessment and control.

OHS guidelines may include:

- appropriate workplace provision of first aid kits and fire extinguishers
- codes of practice, regulations and/or guidance notes which may apply in a jurisdiction or industry sector
- enterprise-specific OHS procedures, policies or standards
- hazard and risk assessment of workplace and maintenance activities and control measures
- OHS training register
- safe lifting, carrying and handling techniques, including manual handling, and the handling and storage of hazardous substances
- safe systems and procedures for outdoor work, including protection from solar radiation, fall protection, confined space entry and the protection of people in the workplace
- systems and procedures for the safe maintenance of property, machinery and equipment, including hydraulics and exposed moving parts
- the appropriate use, maintenance and storage of

RANGE STATEMENT	
	PPE.
<i>ESD principles</i> may include:	<ul style="list-style-type: none"> • controlling of effluents, chemical residues, contaminants, wastes and pollution • improving energy efficiency • increasing use of renewable, recyclable and recoverable resources • minimising noise, dust, light or odour emissions • reducing emissions of greenhouse gases • reducing use of non-renewable resources • reducing energy use • preventing organisms from escaping into environment • undertaking environmental hazard identification, risk assessment and control.
<i>PPE</i> may include:	<ul style="list-style-type: none"> • buoyancy vest or personal floatation device (PFD) • hard hat or protective head covering • hearing protection (e.g. ear plugs and ear muffs) • insulated protective clothing for freezers or chillers and refrigeration units • non-slip and waterproof boots (gumboots) or other safety footwear • personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB) • protective eyewear, glasses and face mask • protective outdoor clothing for tropical conditions • respirator or face mask • safety harness • sun protection (e.g. sun hat, sunscreen and sunglasses) • waterproof clothing (e.g. wet weather gear).
<i>Prepare the work area</i> may include:	<ul style="list-style-type: none"> • following documentation, including: <ul style="list-style-type: none"> • hazard recognition, including environmental hazards checklists • legislative requirements • storage requirements • work schedules • work specifications

RANGE STATEMENT	
	<ul style="list-style-type: none"> • checking required consumables are available • required equipment and tools are available and serviceable • safety and environmental considerations prior to commencing work, including: <ul style="list-style-type: none"> • access • contingency equipment, including containment devices • environmental risk management strategies (e.g. drainage containment) • isolation • warnings and barriers.
<i>Operational requirements</i> may be:	<ul style="list-style-type: none"> • jointing of pipework • lubrication of fittings and equipment • maintenance of: <ul style="list-style-type: none"> • life saving and fire fighting appliances • steel work, both cleaning and preparation for, and application of, protective coatings • wires and ropes • packing of glands.

Unit Sector(s)

Unit sector	Vessel operations
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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