



Australian Government

MARN018 Contribute to basic marine dredging operations

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the MAR Maritime Training Package.

Application

This unit involves the skills and knowledge required to contribute to basic marine dredging operations on a vessel.

This includes:

- knowledge of dredging types
- preparing for dredging operations
- following safety procedures for safe dredging operations
- communicating during dredging operations
- conducting dredging operations
- following emergency procedures
- completing dredging operations

This unit applies to people working in the maritime industry in the capacity of a crew member on a dredge.

Licensing and Regulatory information

No licensing, regulatory or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

N – Seamanship.

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare for dredging operations

- 1.1** Identify the differences between hydraulic, mechanical and air lift dredges
- 1.2** Dredging documentation, tasks and work requirements are confirmed with appropriate personnel during dredging operations pre-start meeting
- 1.3** Emergency procedures and contingency plans are confirmed with appropriate personnel
- 1.4** Method of communication to be used during dredging operations is confirmed and tested with appropriate personnel in accordance with workplace procedures and instructions
- 1.5** Clarification is sought when any instruction or workplace procedure is not understood (if relevant)
- 1.6** Appropriate personal protective equipment (PPE) is selected, checked and used according to workplace procedures

2 Follow safety procedures for safe dredging operations

- 2.1** Hazards and environmental issues for dredging operations are identified, risks assessed, and control measures implemented in accordance with workplace procedures, instructions and scope of own work responsibilities
- 2.2** Equipment and gear for dredging operations are located and checked in accordance with pre-operational checks, workplace procedures, manufacturers' specifications, and instructions
- 2.3** Faults or damage to equipment and gear are reported immediately to the appropriate person in accordance with workplace procedures and instructions
- 2.4** Routine maintenance of dredging equipment and gear is performed according to workplace procedures, instructions and safe work practices

3 Communicate during dredging operations

- 3.1** Communication is maintained and is clear, appropriate and timely with personnel during dredging operations in accordance with workplace procedures and instructions at all times
- 3.2** Appropriate methods are used to communicate with personnel during dredging operations at all times and in

accordance with workplace procedures and instructions

- 3.3** Hazards and risks that occur during dredging operations including debris in dredging equipment are reported to the appropriate personnel at all times in accordance with workplace procedures and instructions

4 Assist with dredging operations

- 4.1** Safety on deck is maintained during dredging operations at all times in accordance with workplace procedures and instructions
- 4.2** Situational awareness when working on deck, including overhead dangers, pipe movements and spoil discharge points is maintained at all times
- 4.3** Dredging equipment and gear is operated in accordance with manufacturers' specifications, workplace procedures and instructions
- 4.4** Dredging equipment is cleared and cleaned of debris as required
- 4.5** Working load limit (WLL)/SWL of gear and equipment are identified and not exceeded and are maintained within certified limits at all times
- 4.6** Environmental protection procedures are followed at all times and any sign of a potential environmental threat is recognised and immediately reported to appropriate personnel

5 Follow emergency procedures

- 5.1** Emergency procedures are followed in accordance with the vessel safety management system (SMS) and dredging plan
- 5.2** PPE is selected and used according to emergency procedures and instructions
- 5.3** Communication with appropriate personnel is maintained at all times during an emergency according to emergency procedures and instructions

6 Complete dredging operations

- 6.1** Dredging equipment and gear is recovered, cleaned, stowed and secured in accordance with workplace procedures and instructions
- 6.2** Suction and discharge disconnection is completed in accordance with workplace procedures and instructions
- 6.3** Dredging equipment and gear are inspected during recovery and faults and damage are reported immediately to the

appropriate personnel in accordance with workplace procedures and instructions

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the MAR Maritime Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a new unit. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>