



Australian Government

MARC008 Manage fuel systems

Release: 2

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Modification History

Release 2. Range of Conditions updated to include relevant information.

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to manage the fuel and fuel oil systems of a vessel to ensure safety of operation and to avoid pollution of the marine environment.

This unit applies to engine workers in the maritime industry working as a Marine Engine Driver Grade 2 Near Coastal on vessels up to 750 kW or as a Marine Engine Driver Grade 1 Near Coastal on vessels up to 1500 kW or as a Marine Engine Driver Steam.

This unit has links to legislative and certification requirements.

Pre-requisite Unit

Not applicable.

Competency Field

C - Equipment Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

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

1 Plan refuelling

- 1.1 Fuel tanks are dipped to establish current level of fuel
- 1.2 Amount of fuel on board vessel is calculated and positioning of fuel is determined
- 1.3 Impact of refuelling on vessel safety is determined
- 1.4 Fuel is ordered according to organisational procedures

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|---|--|
| 2 Prepare vessel for refuelling | <ul style="list-style-type: none">2.1 Vessel is positioned and secured for refuelling2.2 Refuelling equipment is correctly deployed according to organisational procedures2.3 Communication between all people involved in refuelling procedures is established2.4 Tank valves are opened as necessary and refuelling operations are performed according to organisational procedures and regulatory requirements2.5 Tanks are dipped to ensure correct amount of fuel has been received |
| 3 Complete refuelling operations | <ul style="list-style-type: none">3.1 Shut-down procedures are conducted according to organisational procedures3.2 Refuelling equipment is secured according to organisational procedures3.3 Refuelling records are completed according to organisational procedures and regulatory requirements3.4 Malfunctions, faults, irregular performance or damage to refuelling equipment are recorded according to organisational procedures |
| 4 Manage an emergency | <ul style="list-style-type: none">4.1 Appropriate response is made to emergency situation according to organisational procedures4.2 All personnel are correctly notified and their activities are managed to ensure their safety, according to organisational procedures4.3 Waste containment measures are implemented to protect the environment4.4 Appropriate authorities are notified when applicable4.5 Incident is recorded according to regulatory requirements and organisational procedures |

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

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

Impact of refuelling on vessel safety include one of the following:

- ignition of released fuel vapours
- loss of stability

Refuelling equipment include one or more of the following:

- bunding
- bunker flag (B Flag)
- firefighting equipment
- no smoking signs
- scupper plugs
- spill kit

Shut-down procedures include one or more of the following:

- communications with fuel supplier
- valve closure

Refuelling records include one or more of the following:

- logbook
- oil record book
- port authority documentation

Emergency situations include one or more of the following:

- fire
- hose rupture
- spillage

Appropriate authorities include one or more of the following:

- environmental protection authority
- fire and emergency services
- port authority

Unit Mapping Information

This is a new unit. This unit is equivalent to MARC3001A Manage fuel systems.

Links

MAR Maritime Training Package Companion Volume Implementation Guide at: -
http://companion_volumes.vetnet.education.gov.au/Pages/TrainingPackage.aspx?pid=22