



Australian Government

**MARA013 Contribute to basic cargo
operations on oil and chemical tankers
(basic oil and chemical)**

Release: 1

MARA013 Contribute to basic cargo operations on oil and chemical tankers (basic oil and chemical)

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 recognise hazards associated with oil and chemical tankers and apply appropriate hazard control measures to ensure safe cargo operation. It applies to Seafarers required to assist in the basic cargo operations on oil and chemical tankers (basic oil and chemical).

This unit applies to people working in the maritime industry in the capacity of:

- Chief Mate
- Deck Officers
- Engineering Officers
- Engineers
- Masters
- Ratings.

Licensing/Regulatory Information

This unit is equivalent to and delivers the objectives of the following STCW provisions:

- STCW Reg V/1-1 and Code Section A-V/1-1 (1 & 2), Table A-V/1-1-1.

Legislative and regulatory requirements are applicable to this unit.

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as Chief Mate, Deck Officers, Engineering Officers, Engineers, Masters and Ratings for basic operations on oil and chemical tankers and to meet regulatory requirements this unit must be delivered consistent with Marine Orders and with the relevant sections of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
- Those regulatory requirements include STCW International Maritime Organization (IMO) model course competencies and areas of knowledge, understanding and proficiency, together with the estimated total hours required for lectures and practical exercises. Teaching staff should note that timings are suggestions only and should be adapted to suit individual groups of trainees depending on their experience, ability, equipment and staff available for training.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo and Vessel Stability

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Recognise characteristics of tanker cargo and tankers to ensure the safe transfer and transport of cargo

2 Comply with legislative and organisational requirements for safe transfer and transport of tanker cargo

PERFORMANCE CRITERIA

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

1.1 Features of various types of oil and chemical tankers are outlined

1.2 Cargo operations of tankers are identified

1.3 Properties of cargo being transported are identified and their impact on safety, the environment and vessel operations is recognised

1.4 Hazards associated with the transport of cargo are clarified according to emergency response documentation

1.5 Hazard controls associated with tanker cargo are employed according to organisational procedures

2.1 Safety data sheets (SDS)/material safety data sheets (MSDS) relevant to cargo are accessed and procedures for tanker safety and safety management are identified

2.2 SDS/MSDS are interpreted to identify relevant cargo-related hazards to the vessel and to personnel

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| | 2.3 | Legislative and organisational requirements are interpreted to identify appropriate actions for safe transfer and transport of cargo |
| 3 | Take precautions to prevent hazards | |
| | 3.1 | Organisational policies and procedures to minimise hazards are identified |
| | 3.2 | Type and severity of hazard posed by cargo is recognised |
| | 3.3 | Transfer and transport of cargo is monitored to prevent hazards |
| | 3.4 | Monitoring equipment, where installed, is regularly inspected and used according to organisational procedures |
| 4 | Recognise hazardous situation | |
| | 4.1 | Source of hazard is identified according to organisational procedures |
| | 4.2 | Risk is assessed considering severity and likelihood of consequences |
| | 4.3 | Control measures to minimise risk are implemented to level of responsibility or referred to appropriate person for permission or further action |
| | 4.4 | Containment procedures are applied, where appropriate |
| | 4.5 | Appropriate safety procedures are followed and personal protective equipment (PPE) is used according to organisational procedures |
| | 4.6 | Risk is eliminated where possible, and if not practical, actions are taken to control risk |
| | 4.7 | Appropriate firefighting equipment is identified to carry out firefighting operations |
| 5 | Take precautions to prevent pollution of the environment from the release of oil or chemicals | |
| | 5.1 | Procedures to prevent pollution are identified and observed at all times |
| | 5.2 | Measures to prevent pollution during normal and emergency situations are applied according to regulatory requirements and organisational procedures |

- 5.3 All relevant information is immediately reported to appropriate persons when a spill is detected or a malfunction has occurred that poses a risk of a spill
- 5.4 All required spill containment procedures are correctly implemented according to regulatory requirements and organisational procedures

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.

Unit Mapping Information

This unit replaces and is equivalent to MARA002 Contribute to safe cargo operations on oil and chemical tankers.

Links

Companion Volume implementation guide can be found in VetNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>