



**Australian Government**

# **MARJ007 Monitor environmental management on a vessel**

**Release: 2**

# MARJ007 Monitor environmental management on a vessel

## Modification History

**Release 2.** This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor statement changes in Knowledge Evidence
- Minor statement changes in Assessment Conditions.

**Release 1.** New unit of competency. Licensing/regulatory information has been incorporated in accordance with Regulatory requirements. Assessment Requirements have been strengthened in accordance with Regulatory requirements.

## Application

This unit involves the skills and knowledge required to monitor the implementation of environmental management policies and procedures on a vessel up to 100 m to ensure compliance with marine regulations and environmental considerations.

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

- Marine Engine Driver Grade 1 Near Coastal
- Master Inland Waters
- Master up to 24 metres Near Coastal
- Master up to 45 metres Near Coastal.

## Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

This unit of competency is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master Inland Waters, Master up to 24m NC, Mate <100m NC, Master up to 45m NC and Marine Engine Driver Grade 1 NC as specified in Marine Order 505.

Seafarers seeking certification should check with AMSA.

## Pre-requisite Unit

Not Applicable.

## Competency Field

J - Environment

## Unit Sector

Not Applicable.

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

### PERFORMANCE CRITERIA

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

#### **1 Ensure crew are able to implement environmental work practices**

- 1.1** Information on environmental management policies and procedures is accessible and communicated to crew
- 1.2** Information about identified environmental hazards and outcomes of risk assessments and risk control procedures are accessed and communicated to crew
- 1.3** Crew are informed of environmental hazards and risk control measures relating to their work responsibilities
- 1.4** Mentoring and coaching are provided to support individuals or crew to implement procedures to support environmental management
- 1.5** Crew is supported to implement relevant principles to meet environmental obligations and regulatory requirements
- 1.6** Crew is consulted and environmental issues relevant to their work role are identified and promptly resolved or referred to appropriate personnel

#### **2 Monitor observance of environmental management procedures**

- 2.1** Procedures for environmental management on the vessel are clearly defined and followed
- 2.2** Deviations from environmental management procedures are identified and addressed
- 2.3** Personal behaviour is monitored to ensure it is consistent with environmental management procedures
- 2.4** Housekeeping standards on the vessel are maintained
- 2.5** Breaches of environmental protection requirements are documented according to organisational procedures and

|                                                                        |            |                                                                                                                                       |
|------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------|
|                                                                        |            | regulatory requirements                                                                                                               |
| <b>3 Implement emergency procedures to respond to hazardous events</b> | <b>3.1</b> | Procedures for dealing with hazardous events are promptly implemented as required                                                     |
|                                                                        | <b>3.2</b> | Hazardous events are investigated to identify cause                                                                                   |
|                                                                        | <b>3.3</b> | Control measures to prevent recurrence and to minimise risks of hazardous events to the marine environment are implemented            |
|                                                                        | <b>3.4</b> | Emergency is reported in accordance with organisational procedures and regulatory requirements                                        |
| <b>4 Maintain and improve vessel environmental management</b>          | <b>4.1</b> | Risk assessments are conducted and appropriate control measures are identified and implemented according to organisational procedures |
|                                                                        | <b>4.2</b> | Appropriate records and log book entries are made to assist the review of managing environmental protection measures                  |
|                                                                        | <b>4.3</b> | Potential hazards are identified, assessed and removed or reported according to organisational procedures                             |
|                                                                        | <b>4.4</b> | Recommendations arising from risk assessments are implemented within level of responsibility                                          |
|                                                                        | <b>4.5</b> | Inadequacies in control measures are identified and reported according to organisational procedures                                   |
|                                                                        | <b>4.6</b> | Opportunities for improving environmental performance are identified and raised with appropriate personnel                            |

## 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 MARJ002 Monitor environmental management on a vessel.

## Links

Companion Volume Implementation Guides are found in VETNet -

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

# Assessment Requirements for MARJ007 Monitor environmental management on a vessel

## Modification History

**Release 2.** This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor statement changes in Knowledge Evidence
- Minor statement changes in Assessment Conditions.

**Release 1.** New unit of competency. Licensing/regulatory information has been incorporated in accordance with Regulatory requirements. Assessment Requirements have been strengthened in accordance with Regulatory requirements.

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- communicating information about environmental management to crew
- conducting a risk assessment for environmental issues and hazards on a vessel and making recommendations to mitigate the risk/s identified
- ensuring that appropriate and timely actions are taken in response to emergencies
- ensuring that environmental records and documentation are accurate, complete and timely, according to organisational and regulatory requirements
- ensuring that housekeeping standards are maintained, including:
  - pollution control and equipment
  - waste minimisation and control
- identifying typical pollution control problems and taking appropriate actions
- implementing preventative and remedial anti-pollution procedures according to organisational and regulatory requirements
- implementing recommendations arising from risk assessments
- participating in consultation processes to improve environmental management in the organisation
- supporting others to follow environmental management procedures.

## Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- documentation system and procedures
- effects on marine environment of various possible pollution incidents

- environmental risk control measures, including:
  - ballast water management
  - bilge pumping
  - cofferdams around fuel vents and manifolds
  - controlling emissions of gas and smoke
  - coping with increased volume of garbage, bilge water, sludge and sewage
  - loss of vessel
  - oil spill containment equipment
  - preventing cargo spillage or loss
  - preventing fuel and oil spillage
  - preventing sewage discharge
  - signage
  - sound operational procedures
  - special management areas/environmentally sensitive sea areas
  - stowage and management of explosive and flammable materials
  - waste management - collection, treatment, recycling or disposal
- environmental hazards associated with work activities on a vessel, including:
  - anchoring
  - harm to marine life
  - noise
  - oil pollution
  - polluting emissions of gas and smoke
  - poorly maintained equipment and machinery resulting in pollution
  - spillages of cargo
  - waste pollution
- investigations of non-compliance and risk assessment processes
- legal responsibilities as determined by relevant legislation, codes of practice, policies and procedures to protect the marine environment
- maintaining compliance with legislation for protection of the marine environment
- operational requirements of water, bilge, waste, pollution and recycling management processes used on various types and sizes of vessels
- own responsibilities for preventing pollution of the marine environment
- policies and procedures to support environmental management
- pollution control problems and related measures to protect the marine environment
- principles of environmental management
- principles of risk management
- providing access to and maintaining current environmental management information for the crew
- requirements for fishing, anchoring and other activities in environmentally sensitive areas
- requirements under Australian and or international legislation and conventions for reporting incidents related to breaches of the statutory codes and measures for the protection of the

marine environment

- responsibilities of self and employer to manage environmental issues
- responsible resource utilisation on the vessel, consistent with organisational policies
- ways of communicating information about environmental management to crew, including:
  - environmental management policies and procedures
  - environmental obligations and regulatory requirements
  - identified environmental hazards
  - outcomes of risk assessments
  - outcomes of risk control procedures
- work health and safety (WHS)/occupational health and safety (OHS) requirements and safe work practices.

## Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Practical assessment must occur in a workplace, or realistic simulated workplace, under the normal range of workplace conditions.

Simulations and scenarios may be used where situations cannot be provided in the workplace or may occur only rarely, in particular for situations relating to emergency procedures and adverse weather conditions where assessment would be unsafe, impractical or may lead to environmental damage.

Resources for assessment must include access to:

- applicable documentation, such as legislation, regulations, codes of practice, safety management system (SMS), workplace procedures and operational manuals, including International Convention for the Prevention of Pollution from Ships (MARPOL)
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry, including bilge systems and spill prevention equipment.

## Links

Companion Volume Implementation Guides are found in VETNet -

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