



Australian Government

MARJ008 Ensure compliance with pollution prevention requirements

Release: 2

MARJ008 Ensure compliance with pollution prevention requirements

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.

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 monitor and ensure compliance with the International Convention for the Prevention of Pollution from Ships (MARPOL) and environmental management legislation.

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

- Electro-Technical Officer (STCW Electro-Technical Officer Unlimited)
- Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited)
- Engineer Class 3 Near Coastal
- Master of a commercial vessel up to 500 gross tonnage (GT)
- Master of a commercial vessel up to 100 metres Near Coastal
- Watchkeeper Deck.

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

- Regulatory requirements include STCW International Maritime Organisation 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.

Near Coastal Qualifications:

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as an Engineer Class 3 Near Coastal or Master up to 100 metres Near Coastal as specified in Marine Order 505.

Blue Waters Qualifications:

- This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as an Electro-Technical Officer (STCW Electro-Technical Officer Unlimited), Engineer Watchkeeper (STCW Engineer Watchkeeper Unlimited), Master on a commercial vessel up to 500 gross tonnage (GT) or Watchkeeper Deck 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).

Training providers seeking to offer this unit of competency must gain AMSA approval before the unit is offered.

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.

1 Confirm environmental management responsibilities

2 Develop a positive environmental reputation

PERFORMANCE CRITERIA

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

1.1 Legislative and regulatory requirements, and approvals that apply to the vessel are interpreted

1.2 Own scope of authority/responsibility for achieving specific environmental outcomes for the vessel and the roles of other key personnel is clarified

1.3 Resources available to implement environmental management policies for the vessel are identified

2.1 Stakeholders, their relationship to the vessel and perceived attitudes about the vessel are identified

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| | 2.2 | Appropriate strategies are used to foster the trust and confidence of stakeholders |
| | 2.3 | Requests for information are responded to in the appropriate format and a timely manner |
| | 2.4 | Difficult situations are identified and solutions are negotiated using a collaborative approach |
| | 2.5 | Regular feedback is obtained and used to enhance positive relationships |
| 3 | Provide environmental management information and training | |
| | 3.1 | Environmental management plans and recent incident reports are used to identify training needs of crew members |
| | 3.2 | Information and training are developed and provided to ensure all crew members understand their environmental obligations/responsibilities |
| | 3.3 | Crew member understanding of environmental obligations/responsibilities for work areas and activities is confirmed |
| | 3.4 | Effectiveness of the information and training is monitored and additional information/training is provided, as required |
| 4 | Assess environmental impacts and risks | |
| | 4.1 | Activities are reviewed to identify implications for environmental management |
| | 4.2 | Potential risks and incidents that may cause harm to the environment are identified |
| | 4.3 | Inspections and in situ measurements are conducted to quantify risks and impacts |
| | 4.4 | Assessment of risks and impacts are reported according to organisational procedures |
| 5 | Ensure environmental monitoring and management plans are implemented | |
| | 5.1 | Environmental monitoring instruments are checked to ensure they are fully functioning |
| | 5.2 | Specified environmental monitoring and inspections are conducted to check performance against environmental management requirements |

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| | 5.3 | Additional monitoring/inspections are conducted after atypical events or requests from authorities to assess whether environmental management plan is operating |
| | 5.4 | Results for monitoring/inspections are analysed to identify significant trends, non-conformance and/or incidents |
| 6 | Respond to environmental non-conformance and incidents | |
| | 6.1 | Unusual situations, unexpected risks/hazards and potential/actual environmental incidents are recognised |
| | 6.2 | Organisational procedures for responding to environmental non-compliance and incidents are implemented to ensure prompt control and remediation |
| | 6.3 | Causes of non-compliance and incidents are investigated according to organisational procedures |
| | 6.4 | Findings are analysed to identify opportunities to improve work practices, environmental controls, crew training and/or management procedures |
| | 6.5 | Corrective/preventative actions are implemented to prevent recurrence of non-compliance and incidents, and to reduce risks |
| | 6.6 | Reports are completed according to organisational procedures |
| 7 | Keep the Master informed about environmental performance | |
| | 7.1 | Regular reports about environmental performance are provided |
| | 7.2 | Opportunities and recommendations for improvements are reported |
| | 7.3 | Master's advice is sought when challenges are beyond own scope of technical competence or when input from environmental specialist may be required |
| 8 | Maintain environmental records | |
| | 8.1 | Required records are prepared and maintained according to regulatory and organisational requirements |
| | 8.2 | Records are stored to enable easy access and review by authorised personnel according to regulatory and organisational requirements |

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 MARJ003 Ensure compliance with environmental management legislation.

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 MARJ008 Ensure compliance with pollution prevention requirements

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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:

- accessing, interpreting and applying regulatory requirements
- applying procedures for monitoring vessel operations and ensuring compliance with International Convention for the Prevention of Pollution from Ships (MARPOL) requirements are fully observed
- clearly explaining environmental management concepts, principles and procedures to others
- completing reports, including:
 - hazard near miss report form
 - monthly environmental report
 - non-conformance report form
 - regulatory agency reports
 - vessel incident investigation report
 - waste disposal logbooks
 - weekly environmental report
- maintaining accurate environmental records
- maintaining actions to ensure a positive environmental reputation
- monitoring the implementation of environmental management plans, policies and procedures, and specified work methods
- preparing records, including:
 - contractor and supplier information
 - digital photographs
 - environmental monitoring data
 - records of environmental non-conformance, incidents or significant impacts
 - records of monitoring equipment purchase, calibration, inspection, maintenance and service

- records of training
- records required by permit, approval or licence conditions
- regularly inspecting vessel for environmental risks and impacts
- responding to complaints and requests for information from authorities and authorised personnel.

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:

- anti-fouling systems
- anti-pollution equipment, sewage plant, incinerator, comminutor and ballast water treatment plan
- anti-pollution procedures and all associated equipment
- ballast water management and their discharge criteria
- controlled discharge of oil
- environmental legislative/regulatory requirements and responsibilities relevant to the vessel
- environmental management and training information, including:
 - due diligence and duty to notify
 - environmental management actions and checklists, and methods/procedures for specific activities
 - incident management and reporting
 - introduction to vessel, environmental considerations and sources of environmental information
 - legislative requirements
 - licensing/compliance requirements
 - organisational environmental management policy
- environmental protection/management terminology, concepts and principles
- garbage management systems and anti-fouling systems
- garbage record book
- importance of proactive measures to protect the marine environment, including:
 - conventions and legislation adopted by various countries
 - MARPOL, all relevant Annexes and International Maritime Organization (IMO) circulars
- organisational environmental management plans, procedures, control measures and management actions for vessel
- organisational procedures for:
 - identifying and assessing environmental risks and impacts
 - managing stakeholder relations
 - record management and reporting, including oil record book
 - responding to complaints and other environmental incidents
- precautions to be taken to prevent pollution of the marine environment, including:

- Annexure I - oil
- Annexure II - noxious liquid substances (NLS) in bulk
- Annexure III - harmful substances carried by sea in packaged forms or in freight containers, portable tanks or road and rail tank wagons
- Annexure IV - sewage
- Annexure V - garbage
- Annexure VI - air pollution
- potential risks and incidents, including:
 - ballast water discharge
 - disposal of waste material, including sewage and garbage
 - over-side maintenance work
 - spill or release of hazardous chemicals/materials
- shipboard marine pollution emergency plan
- shipboard oil pollution emergency plan (SOPEP)
- stakeholders, including:
 - cargo owners
 - government officials
 - port authorities
- vessel characteristics and environmental issues, risks and impacts
- vessel response plan
- volatile organic compound (VOC) management plan
- work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements and 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, workplace

- procedures and operational manuals
- tools, equipment, machinery, materials and relevant personal protective equipment (PPE) currently used in industry.

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