



Australian Government

MARM005 Assess compliance with marine environment protection requirements

Release: 1

MARM005 Assess compliance with marine environment protection requirements

Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to survey a commercial vessel to determine compliance with marine regulations for the protection of the environment.

This unit applies to people working in the maritime industry as a marine surveyor assistant.

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

Pre-requisite Unit

Not applicable.

Competency Field

M – Marine Surveying

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 Prepare for survey	1.1	Relevant national and state/territory standards and regulatory requirements for preventing pollution to marine environment are identified, reviewed and incorporated into survey plan
	1.2	Sources and types of pollutants common to a range of different commercial vessels are identified and verified with principal surveyor
	1.3	Powers of surveyor relevant to detecting and reporting marine pollution protection compliance in respect to vessel operations are identified and confirmed against regulatory requirements, and organisational policy and procedures

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| | 1.4 | Preventative and remedial anti-pollution procedures are identified according to relevant standards and regulatory requirements |
| | 1.5 | Survey plan is developed and survey schedule is agreed with relevant personnel |
| 2 Survey compliance levels | 2.1 | Survey is carried out according to agreed schedule, and machinery and equipment are inspected for compliance with marine protection requirements |
| | 2.2 | Flammable and hazardous materials on board vessel are inspected for compliance with storage and anti-pollution requirements |
| | 2.3 | Records relevant to preventing pollution on board commercial vessels are reviewed for compliance with relevant national and state/territory legislation and regulatory requirements |
| | 2.4 | Procedures, systems and measures used to prevent a range of pollution types are reviewed with vessel owner/s or crew |
| | 2.5 | Management of environmental issues that may not be covered under marine safety regulations are identified and communicated to vessel owner/s and crew during survey |
| 3 Finalise survey | 3.1 | Measures for treating a range of different pollutants, machinery and equipment identified as non-compliant are discussed with vessel owner/s and crew |
| | 3.2 | Action plan to rectify this non-compliance is agreed and documented in survey report |
| | 3.3 | Survey report is finalised and reviewed for completeness before submission to the authority |
| | 3.4 | Non-compliance relating to protecting marine environment is recorded and reported according to statutory 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.

National and state/territory standards and regulatory requirements include one or more of the following:	• Australian Intergovernmental Agreement on a National System for the Prevention and Management of Marine Pest Incursions • International Convention for the Prevention of Pollution from Ships (MARPOL) • National Plan to Combat the Pollution of the Sea by Oil • Protection of the Sea (Prevention of Pollution from Ships) Act 1983 • relevant sections of the National Standard for Commercial Vessels (NSCV) relating to protecting marine environment
Sources of pollutants include one or more of the following:	• bilges • deck equipment • engines • food waste • fuel: • containments and transfer systems • pumps • hydraulic pumps • lubricants, gas, cleaning and coating products • sewage pumps • vents, drains, toilets
Types of pollutants include one or more of the following:	• air • ballast water • batteries and gasses • cargo and packaging • engine: • exhaust fumes and ventilation systems • noise • grey water, black water and ventilation • noise • oil, sewage, garbage, noxious substances • unknown fluids
Preventative and remedial anti-pollution procedures include one or more of the following:	• design and construction features such as save-alls, vents, filling points, combing drains, scuppers, freeing ports, bilges and strum boxes • legislative requirements such as garbage disposal at sea guidelines for: • controlling gas and smoke polluting emissions • effectively managing waste, pollution and recycling

	- processes - effectively managing ballast operations - preventing cargo spillages - preventing fuel and oil spillages - operational procedures such as fuel transfer, ballast operations, cargo operations (including lashing) - pollution control signage - shipboard housekeeping
Relevant personnel must include:	- attending surveyor - environmental protection agency - maritime authorities - owner, master or agent of vessel - other interested parties
Machinery and equipment include one or more of the following:	- effective management of ballast operations - emission control equipment - pollution control instructions - pumps - shipboard housekeeping - valves - waste storage and recycling equipment - water management equipment, including cooling water, ballast water and bilge systems
Flammable and hazardous materials include one or more of the following:	- chemicals - leaning products - LPG cooking gas - lubricants - spare fuel
Records include one or more of the following:	- ballast record book - deck and engine room log books - garbage record books - oil record books - sewage record books, including test results
Environmental issues that may not be covered under marine safety regulations must include:	- ballast water management - damage to sensitive environments through anchoring - fishing restrictions - laying pots/traps/moorings - noise

Unit Mapping Information

This unit replaces and is equivalent to MARM4001A Assess compliance with marine environment protection requirements.

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 MARM005 Assess compliance with marine environment protection requirements

Modification History

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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, performance criteria and range of conditions on at least one occasion and include:

- accurately identifying statutory requirements for pollution prevention systems and procedures for commercial vessels
- applying relevant work health and safety/occupational health and safety (WHS/OHS) requirements and work practices
- communicating effectively verbally and in writing
- completing required documents related to breaches of environmental protection legislation
- developing effective planning documents
- ensuring behaviour reflects relevant current legislative and regulatory requirements
- providing high quality reports
- reading and interpreting instructions and procedures related to environmental considerations
- recognising pollution control problems and hazards that may occur on a commercial vessel and taking appropriate mitigating action
- working safely and collaboratively with others when surveying environmental considerations.

Knowledge Evidence

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

- certificates and other documents required by relevant Australian and/or international legislation, and conventions for protecting marine environment
- effects on marine environment of various possible pollution incidents
- operational characteristics of emission control equipment used on various types and sizes of commercial vessels
- operational requirements of water, fuel, bilge, waste, pollution and recycling management processes used on various types and sizes of commercial vessels
- pollution control problems and related measures to protect marine environment
- powers of surveyors and regulatory authorities in respect to vessel operations related to pollution prevention and compliance to standards

- relevant legislation, regulations, codes of practice, policies and procedures to protect marine environment
- requirements under relevant Australian and/or international legislation and conventions for reporting incidents related to breaches of statutory codes and measures for protecting marine environment
- sources of information and documentation, including:
 - certificates and other documents required by regulations for protecting marine environment
 - equipment manufacturer instructions and recommended procedures
 - instructions of relevant maritime authorities
 - operational orders
 - relevant regulations for type of vessel involved
 - relevant standards for protecting marine environment, including guidelines issued under the Australian Intergovernmental Agreement on a National System for the Prevention and Management of Marine Pest Incursions
 - vessel log where relevant
- WHS/OHS legislation, policies and procedures.

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must satisfy the National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) standards.

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.

Assessment must occur in workplace operational situations or where these are not available, in simulated workplace operational situations or an industry-approved marine operations site that replicates workplace conditions where assessing compliance with marine environment protection requirements can be conducted.

Resources for assessment include access to:

- relevant documentation including workplace procedures, regulations, codes of practice and operation manuals
- tools, equipment, materials and personal protective equipment currently used in industry to survey a commercial vessel

Performance should be demonstrated consistently over time and in a suitable range of contexts.

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