



Australian Government

**Assessment Requirements for MARD005
Manage operations and maintenance on
vessels limited by tonnage or near coastal
operations**

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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.

Release 1. This is the first release of this unit of competency in the MAR Maritime Training Package.

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:

- carrying out operational management of vessel while underway, when berthed or moored, when slipped or in dry dock, during routine or unplanned events
- communicating effectively with other personnel when managing operations and maintenance of vessel limited by tonnage or near coastal operations
- communicating with multilingual crew using established techniques
- complying with relevant maritime regulations
- identifying problems that can occur when managing operations and maintenance of vessel and initiating appropriate actions
- interpreting and following all safety management procedures and precautions when managing operations and maintenance of vessel limited by tonnage or near coastal operations
- interpreting and monitoring application procedures for managing operations and maintenance of vessel limited by tonnage or near coastal operations
- monitoring selection and use of publications, materials, tools and other equipment involved in managing operations and maintenance of vessel limited by tonnage or near coastal operations
- preparing appropriate reports on outcomes of inspection and maintenance activities
- providing leadership to other shipboard personnel when managing operations and maintenance of vessel limited by tonnage or near coastal operations
- reading and interpreting:
 - safety data sheets (SDS)/material safety data sheets (MSDS)
 - vessel and machinery specifications, gross and net tonnage, machinery design drawings, machine drawings, operational manuals, specifications, and electrical and control circuit diagrams
- recognising and adapting appropriately to cultural differences in the workplace, including modes of behaviour and interactions among crew and others

- taking appropriate precautions to prevent pollution of marine environment
- taking prompt actions to report and/or rectify operational and maintenance problems.

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:

- applicable legislation, regulations and codes of practice
- documents and records, including:
 - company maintenance procedures
 - maintenance schedules and records
 - relevant maritime authorities and regulations related to operations and maintenance of vessels, including Marine Orders
 - stability and cargo documents pertaining to the vessel
 - vessel and equipment manufacturer instructions, specifications and recommended procedures
- maintenance records that must be kept on vessel to meet requirements of company and regulatory authorities
- nature and causes of corrosion of marine surfaces and structures, and available methods for its control
- operational management and maintenance:
 - administering repairs of minor faults and imperfections in painted surfaces and managing preparation of marine surfaces prior to application of prescribed marine coating
 - identifying deterioration of vessel structure and fittings
 - identifying faulty equipment or fittings and arranging for repair or replacement
 - managing application of lubricants to moving parts of vessel equipment
 - managing vessel cargo operation procedures
 - managing vessel stability both normal and adverse operational conditions
 - routine maintenance inspections
- principal features of structure of vessel, with a basic understanding of properties and application of materials used in vessel construction
- procedures for:
 - checking and inspecting vessel stability during a range of operational conditions, including loading and discharging of cargo, as part of routine procedures to ensure compliance with company requirements and established safety rules and regulations
 - initiating and coordinating repair and/or replacement procedures onboard vessels
- the use of publications, tools and equipment required for operational management and maintenance:
 - cargo and stability calculators and publications
 - marine preservative finish application equipment, such as brushes, spray guns, rollers and greasing and lubrication tools
 - rinsing and storing equipment

- safe use of electric and pneumatic power tools, such as grinders, sanders, drills and hand tools, including chipping hammers and scrapers
- the correct selection and use of personal protective equipment (PPE), including:
 - dust and fume masks
 - eye and ear protection
 - safety boots
- relevant sections of applicable maritime regulations
- relevant work health and safety (WHS)/occupational health and safety (OHS) and pollution control legislation and policies
- safety, environmental and hazard control precautions and procedures relevant to inspection and maintenance operations
- slipping and docking procedures suitable for various types of hull forms, including communication techniques used
- typical problems relating to slipping and maintaining vessels and appropriate actions and solutions.

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.

Links

Companion Volume Implementation Guides are found in VETNet -

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