



Australian Government

AURRTA006 Water test vessels

Release: 1

AURRTA006 Water test vessels

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to water test a vessel in order to meet specific customer performance specifications and ensure compliance with statutory regulations. It involves preparing for the task, conducting a vessel safety inspection, water testing the vessel on a waterway, and completing work processes and documentation, including any associated recommendations for further action.

It applies to those working in the marine service and repair industry.

Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.

Competency Field

Marine

Unit Sector

Technical

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to water test vessel	1.1 Job requirements are determined from workplace instructions 1.2 Water testing procedures and information are accessed and interpreted 1.3 Water testing options are analysed and those most appropriate to the circumstances are selected

Elements Elements describe the essential outcomes.	Performance Criteria Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
	1.4 Hazards associated with the work are identified and risks are managed 1.5 Tools and equipment, including personal protective equipment (PPE), are selected and checked for serviceability
2. Conduct safety inspection	2.1 Vessel safety equipment is audited 2.2 Vessel systems and components are checked for seaworthiness, and compliance with manufacturer specifications and applicable state and territory regulations 2.3 Vessel is checked for safety using testing equipment, as required 2.4 Systems and components that fail the safety test are recorded, and supervisor and owner are notified
3. Undertake water testing activities	3.1 Engine performance is tested according to manufacturer specifications, workplace procedures, safety requirements , and state and territory marine safety laws 3.2 Propulsion unit is tested according to manufacturer specifications, workplace procedures, safety requirements, and state and territory marine safety laws 3.3 Hull and hull fittings are tested according to manufacturer specifications, workplace procedures, safety requirements, and state and territory marine safety laws 3.4 Vessel systems that fail water testing are reported according to workplace procedures, and include recommendations for required repairs or adjustments
4. Complete work processes	4.1 Final inspection is made to ensure work is to workplace expectations and vessel is presented ready for use 4.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 4.3 Tools and equipment are checked and stored according to workplace procedures 4.4 Workplace documentation is processed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance and are not explicit in the performance criteria.

Skills	Description
Learning skills to:	locate appropriate sources of information efficiently.
Reading skills to:	- interpret safe operating procedures for vessels from workplace and manufacturer literature - interpret water testing procedures from manufacturer procedures - interpret information from manufacturer and workshop manuals when seeking vessel specifications.
Writing skills to:	legibly and accurately fill out workplace documentation when reporting findings and recording work completed.
Oral communication skills to:	clarify instructions, report findings, and gain customer consent for required rectification measures.
Numeracy skills to:	- interpret numbers on measuring equipment and vessel gauges - use basic mathematical operations, including addition and subtraction, to calculate deviations from manufacturer specifications.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.
Technology skills to:	use measuring equipment, such as multimeters, tachometers and battery load testers.

Range of Conditions

This section specifies work environments and conditions that may affect performance.

Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Safety requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: - selecting and using PPE, including personal flotation devices - following state or territory legislation, regulations and marine safety laws relating to operating a vessel in an estuary or seaway.
---	--

Unit Mapping Information

Equivalent to AURRTA3006 Water test a vessel

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURRTA006 Water test vessels

Modification History

Release	Comment
Release 1	New unit of competency.

Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- water test two different vessels with engines, propulsion units and hull fittings, in which the work must involve water testing navigation lights and safety equipment.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to water testing vessels, including procedures for:
 - selecting and using personal protective equipment (PPE), including personal flotation devices
 - following state or territory legislation, regulations and marine safety laws relating to operating a vessel in an estuary or seaway, including:
 - holding a boat driver licence
 - speed restrictions
 - navigation rules
 - boat capacity
- pre-launch inspection procedures, including inspection procedures for:
 - vessel safety equipment, including:
 - life jackets
 - anchors
 - bailer or fire bucket and lanyard
 - bilge pump
 - compass
 - distress flares

- emergency position indicating radio beacon (EPIRB)
- fire extinguisher
- map
- marine radio
- paddles and oars
- safety and capacity labels
- sound signals
- drinking water
- waterproof torch
- hulls and fittings
- navigation lights
- steering system
- fuel system
- factors influencing vessel performance, including:
 - basic hull design and hydrodynamics
 - hull type, including:
 - planing
 - displacement
 - single and multi-hull
 - hull fittings
 - engine, including:
 - type
 - size
 - single and multi-cylinder
 - engine and hull match
 - engine propeller match
 - vessel, including:
 - type
 - size
 - age
- modifications and additions to existing vessel
 - water testing procedures for vessels, including water testing engine performance, propulsion units, and hull and hull fittings, including:
 - testing engine performance by operating engine through full operating range
 - testing propulsion unit by operating through full range of speeds and directions
 - testing hull and hull fittings by operating through full range of performance conditions
 - testing to establish that current configuration is performing to manufacturer specifications
- procedures for test report compilation and presentation.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the vessels that they have water tested, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- appropriate waterway for water testing a vessel
- workplace instructions
- manufacturer vessel specifications
- state and territory marine safety laws
- two different vessels requiring water testing
- tools, testing equipment and materials appropriate for water testing vessels.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>