



Australian Government

RIIMPO326E Conduct water vehicle operations

Release: 1

RIIMPO326E Conduct water vehicle operations

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to load, haul and distribute water using a water vehicle.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and industry sectors, and must be sourced from state jurisdictions prior to applying this unit.

Unit Sector

Civil infrastructure

Coal mining

Extractive

Metalliferous mining

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare for water vehicle operations	1.1 Access, interpret and apply water vehicle operations documentation 1.2 Obtain, interpret, clarify and confirm work instructions and confirm compliance with documentation and workplace procedures 1.3 Identify hazards and environmental issues, assess the risks and implement control measures in line with workplace policies 1.4 Select and wear personal protective equipment required for work activities 1.5 Follow traffic management signage requirements according to

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	standard operating procedures and safe work practices 1.6 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency 1.7 Coordinate and communicate planned activities with others at the site prior to commencing work activity
2. Operate water vehicle in line with established requirements	2.1 Carry out prestart and start-up checks in line with workplace procedures 2.2 Identify faults or defects and rectify or report within scope of own responsibility and according to workplace procedures 2.3 Operate the water vehicle to original equipment manufacturer requirements, and according to workplace procedures 2.4 Manage engine power to ensure distribution of water to complete work activity, and in line with workplace procedures 2.5 Coordinate engine power with gear selection to ensure smooth transition and operation within torque range 2.6 Monitor hazards and risks, and ensure safety of self, other personnel, plant and equipment
3. Load, haul and distribute water to complete work activity	3.1 Position water vehicle at loading and/or distribution points 3.2 Load water vehicle to within the authorised carrying capacity and to suit the site and task conditions 3.3 Operate water vehicle according to site conditions to avoid surge and sway 3.4 Discharge or distribute water efficiently in accordance with work requirements and workplace procedures 3.5 Monitor discharge of water throughout the operations 3.6 Park up, shut down, secure and carry out post operational inspection of equipment in line with workplace procedures

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
4. Conduct housekeeping activities	4.1 Clear work area and dispose of or recycle materials according to workplace procedures 4.2 Manage and/or report hazards to maintain a safe working environment 4.3 Complete and file or distribute documentation in accordance with workplace practices

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skill	Description
Reading	Identifies and interprets relevant information from workplace procedures, documentation, legislation and regulations
Numeracy	Uses equipment operating capacity schedule to confirm safe weight load limits

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIMPO326E Conduct water vehicle operations (Release 1)	RIIMPO326D Conduct civil construction water cart operations (Release 3)	Minor updates to reflect changes to operator maintenance activities, name of unit and content to apply to all industries	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIIMPO326E Conduct water vehicle operations

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 3.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit.

The candidate must demonstrate completion of water vehicle operations that safely, effectively and efficiently follows workplace procedures to carry out work activity on at least two occasions, and include:

- conducting prestart checks prior to commencing operations and shutdown procedures on completion of operations
- loading, hauling, discharging and distribution of water including:
 - completion of discharging of water evenly on a minimum of one material type on each occasion (i.e. two materials in total) to meet moisture content requirements
 - completion of distribution of water into two separate water storage facilities or receptacles
 - completion of dust suppression operations
- driving and operating the equipment, and adjusting techniques to suit site conditions
- parking, shutting down and securing of equipment

In the course of the above work the candidate must also:

- locate and apply relevant documentation, policies and procedures
- select and wear personal protective equipment required for work activities
- inspect and prepare work area
- carry out vehicle refuelling requirements and procedures where applicable
- apply safe work practices, identifying and reporting all potential hazards, risks and environmental issues
- apply problem solving and troubleshooting techniques
- apply water distribution techniques
- identify common equipment faults
- use a range of communications techniques and equipment essential to the safe completion of work activity, including audible and other signals

- meet written and verbal reporting requirements and procedures associated with water vehicle operations
- organise work activities to meet all work requirements
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Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements and performance criteria of this unit. This includes:

Key policies and procedures, legislation and established requirements for water cart operations, including those relating to:

- fires, accidents and emergencies
- work health and safety, including signs of operator fatigue and how it should be managed
- site isolation
- project quality requirements
- maintenance and basic diagnostics
- housekeeping activities
- traffic management plans

Key factors affecting work activities described in performance evidence above, including:

- specifications and characteristics of rigid, articulated and semi-water vehicles
- technical capabilities and limitations
- calculating safe working loads
- equipment specifications
- ground conditions
- materials characteristics
- water distribution systems, type, characteristics, technical capabilities and limitations
- pumps and pumping system operations
- causes and effects of surge and sway in bulk fluid loads

Key features associated with water vehicle operations, including

- dust suppression
- practical field tests for moisture content
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Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
 - a water vehicle
 - water distribution system
 - personal protective equipment
- be conducted in a safe environment; and,

- be assessed in context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory competency standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements.

This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing a high level of RII training product knowledge
- having an understanding and knowledge of legislations and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and
- the minimum years of current** work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must hold the relevant vocational competencies and have current industry skills directly relevant to the training and assessment being provided and must work alongside a trainer and/or assessor to conduct the assessment. This means the industry subject matter expert should hold the unit being assessed (or an equivalent unit), and must also demonstrate skills and knowledge from the minimum years of current work experience specified below, including time spent in roles related to the unit being assessed:

Industry sector	AQF indicator level***	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal	1	1 Year

Mining, Extractive (Quarrying) and Civil Infrastructure	2	2 Years
Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure	3-6	3 Years
Other sectors	Where this unit is being assessed outside of the resources and infrastructure sectors assessor and/or industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no industry standard is specified should comply with any relevant regulation.	

*Guidance on simulated environments has been stipulated in the RII implementation guide located on VETNet.

**Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting a minimum number of site assessments as determined by the relevant industry sector, across various locations.

***While a Unit of Competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

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