



Australian Government

RIIMEX503E Manage dredging operations

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 7.0.

Application

This unit describes the skills and knowledge required to manage dredging in civil construction, metalliferous mining and extractive industries. It involves developing, initiating and administering dredging plans using dredging parameters.

The unit applies to those working in management or technical specialist roles. They generally monitor a broad range of operational activities in their area of responsibility and are responsible for monitoring a safe work environment.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories and industry sectors. Users must check requirements with relevant body before applying the unit.

Unit Sector

Civil construction

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 to manage dredging operations	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply management of dredging operations documentation and confirm the work activity is compliant 1.3 Identify potential hazards and environmental issues, implement control measures within scope of own role and escalate where required 1.4 Select and wear personal protective equipment according

ELEMENT	PERFORMANCE CRITERIA
	to site requirements 1.5 Obtain and interpret geological and survey data 1.6 Obtain, interpret and clarify the dredging plan parameters 1.7 Communicate and coordinate activities with relevant personnel
2. Develop and prepare to implement dredging operations plan	2.1 Communicate planned activities with stakeholders and confirm their support for the work activity 2.2 Identify and source resources and equipment required to implement dredging plan 2.3 Develop and document dredging plan considering the dredging operations parameters and geological and survey data 2.4 Identify team training needs and confirm required training is provided 2.5 Prepare and present dredging plan budget
3. Implement, monitor and adjust dredging operations plan	3.1 Communicate and clarify dredging plan with involved personnel according to job requirements 3.2 Provide ongoing support and advice to those implementing dredging plan 3.3 Confirm that dredge area is marked out according to job requirements 3.4 Confirm records and reports are maintained according to site requirements 3.5 Monitor dredging performance and outcomes against dredge plan expectations and budget 3.6 Resolve variances in consultation with relevant stakeholders and issue instructions for adjustments to the plan

Foundation Skills

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

SKILL	DESCRIPTION
Numeracy	Calculates resourcing requirements
Oral communication	Conveys information and requirements clearly and listens actively

SKILL	DESCRIPTION
Reading	Identifies and interprets relevant information from workplace procedures, documentation and legislation
Writing	Prepares specific information that complies with requirements, using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIMEX503D Manage dredging operations.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for RIIMEX503E Manage dredging operations

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- manage dredging operations on at least two occasions, including:
 - developing, initiating and administering dredging plans and operating procedures using dredging parameters
 - assessing and prioritising implementation processes
 - monitoring dredging operations and adjusting work plan when required
 - writing reports to communicate procedural activity, breach or inadequacies to procedure and review process.

During the above, the candidate must:

- locate and apply relevant legislation, documentation, policies and procedures
- implement the requirements, procedures and techniques for to manage dredging operations safely, effectively and efficiently, including:
 - identifying relevant information and scope of work necessary to meet required outcomes
 - interpreting and applying operational performance data
 - identifying viable options and selecting options that best meet required outcomes
 - interpreting and applying geological and survey data
 - selecting and assigning plant, equipment, resources and operational techniques
 - implementing hazard identification and risks assessment processes
 - identifying and addressing training needs
- work effectively with others to undertake and complete managing dredging operations that meets required outcomes, including:
 - managing people and processes and providing team leadership
 - complying with written and verbal reporting requirements and procedures
 - using communication techniques required to convey information to others

- communicating with team members and others to provide and clarify work instructions
- identifying the training needs of others and preparing training plans.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- legislative requirements for managing dredging operations
- policies, procedures and documentation required to manage dredging operations, including those relating to:
 - environmental protection
 - fire, accident and emergency
 - hazard identification and risk management processes
 - personal protective equipment
 - quality control, communications and statutory compliance
 - site operational, quality and communication requirements
 - site product characteristics
 - site requirements
 - work health and safety
 - workplace recording and reporting requirements
- emergency response, evacuation and disaster planning processes and techniques
- principles and techniques for managing dredging operations, including:
 - managing resources, plant and equipment within capabilities and limitations
 - interpreting geological and survey data
 - selecting appropriate pit development options
- roles and responsibilities of relevant personnel involved in the implementation of the mine design systems
- techniques for team leadership, including:
 - consultation and coaching techniques
 - questioning and active listening
 - recording and reporting systems
 - work planning and work monitoring methods.

Assessment Conditions

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

- include access to:
 - personal protective equipment
 - an environment where dredging operations is required
 - equipment required for dredging operations
 - simulated or actual documentation of work requirements and reports

- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes 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 regulatory standards as set out in the Standards for Registered Training Organisations 2015/Australian Quality Training Framework 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 the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence 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 have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as 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 Mining, Extractive (Quarrying)	1	1 year
	2	2 years

Industry sector	AQF indicator level***	Required assessor or industry subject matter expert experience
and Civil Infrastructure		
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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