



Australian Government

RIIMEX403E Supervise canal construction

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 6.0.

Application

This unit describes the skills and knowledge required to supervise canal construction in civil construction, including preparing team members to implement the job plan and overseeing and reporting on canal construction task execution.

It applies to those working in supervisory roles. They generally perform 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

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 applying the principles of canal construction	1.1 Obtain, interpret, clarify and confirm work requirements 1.2 Access, interpret and apply documentation required to supervise canal construction and confirm work activity is compliant 1.3 Identify and address potential risks, hazards and environmental issues and implement control measures 1.4 Select and wear personal protective equipment according to site requirements 1.5 Assess construction tasks and required principles to achieve objectives according to job requirements

ELEMENT	PERFORMANCE CRITERIA
	1.6 Prepare an implementation action plan in consultation with team members
2. Prepare team members to execute tasks	2.1 Confirm required resources are available to meet job requirements 2.2 Communicate instructions to team members and other involved personnel according to job requirements 2.3 Set out tasks required to complete work activity according to job requirements
3. Oversee execution of canal construction tasks	3.1 Implement the action plan in consultation with team members 3.2 Monitor implementation of the action plan according to job requirements 3.3 Initiate adjustments to work practice and job plans as required to meet job requirements 3.4 Confirm plant, equipment and tools maintenance requirements are carried out and recorded according to manufacturer specifications and site requirements
4. Report on the execution of canal construction tasks	4.1 Complete and submit reports according to site requirements 4.2 Review action plan, construction principles and resources used 4.3 Identify training needs of team members and prepare training plans 4.4 Submit recommendations to improve the safety, efficiency and effectiveness of the execution of canal construction tasks

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 and performs mathematical calculations
Oral communication	Conveys information and requirements clearly and listens actively
Writing	Prepares information that complies with requirements, using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIMEX403D Apply the principles of canal construction.

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 RIIMEX403E Supervise canal construction

Modification History

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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:

- supervise canal construction on at least two occasions, including:
 - assessing and assigning plant and equipment, and operational techniques
 - developing and administering work plans
 - overseeing the execution of canal construction tasks
 - monitoring canal construction
 - making adjustments to work plan
 - assessing outcomes to make reasoned recommendations and writing reports
 - preparing and presenting job reports.

During the above, the candidate must:

- locate and apply required legislation, documentation, policies and procedures
- implement the requirements, procedures and techniques to supervise canal construction, including:
 - identifying and interpreting:
 - project site soil, rock, meteorological and geological data
 - project site hydrological and geotechnical data
 - project engineering survey information
 - project specifications, plans and drawings
 - interpreting project contract and specification requirements and procedures
 - analysing environmental issues, hazards and risks, and implementing control measures
- work with others to supervise canal construction that meets required outcomes, including:
 - completing written and verbal reporting requirements and procedures
 - communicating with others to receive and clarify work instructions, including preparing and conducting briefings, toolbox and site meetings

- providing leadership and direction to the team by communicating with others to resolve coordination requirements prior to commencing and during work activities
- identifying the training needs of others and preparing training plans
- applying performance monitoring measures.

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:

- legislation required to supervise canal construction
- policies, procedures and documentation required to supervise canal construction, including those relating to:
 - work health and safety
 - environmental protection
 - waste management
 - hazard and risk management
 - communication techniques and equipment
 - project quality requirements
 - job plans and specifications
 - site requirements
 - manufacturer specifications for required plant and equipment
 - workplace reporting requirements
- construction principles, operational techniques and terminologies including those relating to:
 - canal construction and canal construction sequencing
 - set out requirements and procedures
 - drainage requirements
 - works planning techniques
 - monitoring methods
 - quality management
 - engineering survey principles
 - slope management requirements and procedures
 - estimating principles
- procedures for interpreting:
 - project site soil, rock, meteorological and geological data
 - project site hydrological and geotechnical data
 - project engineering survey information
 - project specifications, plans and drawings
- organising skills, work planning techniques, and work monitoring methods
- procedures for writing reports to communicate procedural activity, breach or inadequacies to procedure and review process of canal construction

- problem solving skills to technical resources and infrastructure issues
- types, characteristics, technical capabilities and limitations of plant and equipment required to supervise canal construction.

Assessment Conditions

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

- include access to:
 - personal protective equipment
 - equipment required to supervise canal construction
- 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 (RTOs) 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) and Civil Infrastructure	1	1 year
	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 Companion Volume 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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