



Australian Government

RIIMEX403D Apply the principles of canal construction

Release: 2

RIIMEX403D Apply the principles of canal construction

Modification History

Release	Comment
1	This unit replaces RIIMEX403A Apply the principles of canal construction
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to apply the principles of canal construction in Civil construction.

This unit is appropriate for those working in supervisory roles.

No licensing or certification requirements apply to this unit at the time of publication.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan and prepare for applying the principles of canal construction	1.1 Access, interpret and apply principles of canal construction documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address potential risks, hazards and environmental issues and implement control measures 1.4 Select and wear personal protective equipment appropriate for work activities 1.5 Assess construction tasks and identify appropriate principles to achieve objectives 1.6 Access, interpret, clarify and share with team members the specific task information and requirements 1.7 Prepare an implementation action plan, in consultation with team members, making best use of the available resources and applying defined construction principles
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	1.8 Acquire and make available the necessary resources for the safe, effective and efficient conduct of the tasks 1.9 Ensure clear and timely instructions are communicated to team members and others involved
2. Oversee the execution of canal construction tasks	2.1 Implement the action plan in consultation with team members 2.2 Monitor implementation of the action plan 2.3 Initiate adjustments to the action plan/work practices, and ensure safe execution of work and achievement of required outcomes 2.4 Ensure plant, equipment and tools maintenance requirements are carried out and recorded
3. Report on the execution of canal construction tasks	3.1 Complete and submit written reports as required 3.2 Review the action plan, construction principles and resources used 3.3 Identify training needs of team members and prepare training plans 3.4 Submit reasoned recommendations to improve the safety, efficiency and effectiveness of the execution of canal construction tasks

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIIMEX403A Apply the principles of canal construction

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 RIIMEX403D Apply the principles of canal construction

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant legislation, documentation, policies and procedures
- implements the requirements, procedures and techniques for the safe, effective and efficient application of the principles of 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
 - assessing and selecting appropriate principles of canal construction and associated techniques
 - analysing environmental issues, hazards and risks, and implementing control measures
- works effectively with others to undertake and complete the application of the principles of canal construction that meets all of the required outcomes including:
 - complying with written and verbal reporting requirements and procedures
 - communicating clearly and concisely 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 clearly and concisely 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
- demonstrates completion of applying the principles of canal construction that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - assessing and assigning appropriate 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

Knowledge Evidence

The candidate must demonstrate knowledge of applying the principles of canal construction through:

- construction principles, operational techniques and terminologies including:
 - 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
- organising skills, work planning techniques, and work monitoring methods
- the principles of canal construction
- 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 issue

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must 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,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,

- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 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.	

*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 frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

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