



Australian Government

RIICTC304D Muck out tunnel earthworks

Release: 2

RIICTC304D Muck out tunnel earthworks

Modification History

Release	Comment
1	This unit replaces RIICTC304A Muck out tunnel earthworks
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 muck out tunnel earthworks in Civil Construction.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan and prepare to muck out tunnel earthworks	1.1 Access, interpret and apply muck out tunnel earthworks documentation and ensure the work activity is compliant 1.2 Obtain, interpret, clarify and confirm work instructions before proceeding Identify, obtain and implement traffic signage requirements 1.3 Select and wear personal protective equipment appropriate for work activities 1.4 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency 1.5 Select and check for faults plant, tools and equipment to carry out tasks 1.6 Identify, address and report environmental issues, potential
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	hazards and risks
2. Bar/scale down loose material	2.1 Identify and position plant and equipment in accordance with job requirements 2.2 Bar/scale down loose material safely
3. Remove spoil by hand	3.1 Remove excavated muck 3.2 Transport muck to spoil heap
4. Load spoil by machine	4.1 Install spoil haulage lines, rail and conveyor system to engineers' and/or manufacturer's specifications 4.2 Operate mucking machines 4.3 Inspect and maintain conveyors to schedule
5. Remove spoil	5.1 Operate hauling engine smoothly 5.2 Operate continuous conveyor system 5.3 Maintain dust controls throughout mucking process
6. Conduct housekeeping activities	6.1 Clear work area and dispose of or recycle materials 6.2 Clean, check, maintain and store plant, tools and equipment 6.3 Carry out housekeeping activities

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

RIICTC304A Muck out tunnel earthworks

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 RIICTC304D Muck out tunnel earthworks

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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 completion of mucking out of tunnel earthworks including:
 - applying equipment/manual handling techniques
 - selecting and using relevant tools and equipment
- works effectively with others to undertake and complete the mucking out of tunnel earthworks that meets all of the required outcomes including:
 - organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication techniques and systems such as signage to advise others of work activity and exclusion zone
- demonstrates completion of mucking out tunnel earthworks that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - completion of mucking out tunnel earthworks to the required job specification including a minimum of ten (10) cubic metres by machine

Knowledge Evidence

The candidate must demonstrate knowledge of mucking out of tunnel earthworks through:

- soil and rock type characteristics

- construction principles
- equipment types, characteristics, technical capabilities and limitations
- project quality requirements
- civil construction terminology
- site isolation and traffic control responsibilities and authorities
- safety data sheets and materials handling methods
- prepared for fire/accident/emergency

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	3-6	5 Years

Construction		
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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