



Australian Government

RIIRAI604D Establish and maintain mine services and infrastructure systems

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIIRAI604A Establish and maintain mine services and infrastructure systems
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 establish and maintain mine services and infrastructure systems in Coal mining.

This unit is appropriate for those working in management or technical specialist roles

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

Unit Sector

Coal mining

Elements and Performance Criteria

1. Plan and prepare mine services and infrastructure systems	1.1 Access, interpret and apply mine services and infrastructure 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 Identify the requirements for and purpose of mine services and infrastructure systems in accordance with legislative requirements and the system of mining 1.6 Establish specifications for the mine services and
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	infrastructure systems from a comprehensive analysis of operating requirements 1.7 Identify options from an analysis of all relevant technical, operational and financial information 1.8 Select the preferred systems options on the basis of performance against specification requirements 1.9 Assess potential locations for mine services and infrastructure by site inspection, locate on mine plan and confirm location
2. Select plant, equipment or services	2.1 Conduct a detailed scoping of the operational requirement and develop key selection criteria, including hazard identification and risk analysis 2.2 Establish specifications for the required plant, equipment and services 2.3 Select the preferred plant, equipment and services options on the basis of performance against specification requirements
3. Establish installation and commissioning systems and procedures	3.1 Establish a system to identify hazards and analyse and evaluate risks associated with the installation of plant, equipment and services 3.2 Plan and prepare for integration of new and existing systems and procedures to achieve optimum performance 3.3 Establish procedures for installing and commissioning plant, equipment and services 3.4 Establish systems and procedures to satisfy identified training requirements
4. Establish management systems for the operation and maintenance of plant, equipment or services	4.1 Establish operational procedures for plant, equipment and services from site and legislative requirements and incorporate into site documentation 4.2 Establish maintenance procedures for plant, equipment and services from site and legislative requirements and incorporate into site documentation 4.3 Establish procedures for reviewing and modifying work processes 4.4 Establish the maintenance of emergency response and evacuation plant, equipment and services in accordance with site requirements 4.5 Establish the system for recording and reporting of plant, equipment and services information
5. Plan and prepare for the	5.1 Identify and interpret the legislative and site implementation requirements

implementation of mine services and infrastructure	5.2 Identify, clarify, in consultation, and communicate roles and responsibilities, to all personnel 5.3 Identify, forecast, obtain and allocate/schedule resources required for the implementation 5.4 Implement mine services and infrastructure systems training program 5.5 Encourage, receive, review and, where appropriate, implement suggestions and recommendations for changes to implementation procedures
6. Establish management systems to audit and review mine services and infrastructure systems	6.1 Establish procedures to audit and review equipment compliance in accordance with legislative and site requirements 6.2 Identify and assess future plant, equipment and services requirements into the planning processes 6.3 Establish procedures to audit and review the currency and compliance of operation and maintenance systems relating to plant, equipment and services 6.4 Establish procedures to audit the training programs for currency and relevance 6.5 Establish procedures for incorporating feedback into the audit/review system 6.6 Establish procedures for response to instances of non-compliance or other discrepancies/deficiencies revealed by audit

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

RIIRAI604A Establish and maintain mine services and infrastructure systems

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 RIIRAI604D Establish and maintain mine services and infrastructure systems

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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 procedures and techniques for the safe, effective and efficient establishing and maintaining of mine services and infrastructure systems including:
 - accessing, interpreting and applying procedures for;
 - managing technical information
 - managing site/legislative requirements
 - establishing recording and reporting systems
 - conducting briefings and handover details
 - applying the principles of mine design
 - hazard identification and risk management
 - work planning and coordination
 - training needs analysis
 - using manufacturers' instructions
- works effectively with others to establish and maintain mine services and infrastructure systems including:
 - managing people and processes
 - resolving conflict
 - coordinating human, financial and physical resources
 - developing, initiating and administering work plans

- interpreting and applying operational performance data
- engaging internal and external stakeholders
- demonstrates completion of establishing and maintaining of mine services and infrastructure systems that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identification of the relevant information and scope of the work
 - identifying the full range of specification requirements
 - identifying all aspects of the mine services and infrastructure systems
 - establishing the audit and review system
 - identifying design/selection options from an analysis of all relevant information
 - selecting the preferred plant, equipment and services options on the basis of performance against specification requirements

Knowledge Evidence

The candidate must demonstrate knowledge in establishing and maintaining mine services and infrastructure systems through:

- legislative, organisation and site requirements and procedures for;
- training
- mine operation procedures
- risk management
- mine reporting procedures
- emergency response and evacuation planning processes and techniques
- audit review processes and techniques
- mine operating procedures for mine services and infrastructure
- mine design relating to mine services and infrastructure
- safety design features of mine services and infrastructure
- safety design features for maintenance of mine services and infrastructure
- specifications for fixed plant and infrastructure
- computer based systems related to the monitoring and operation of mine services and infrastructure
- firefighting systems
- stores system

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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