



Australian Government

Assessment Requirements for RIIRAI605D Establish and maintain an underground mine mechanical plant management system

Release: 3

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Modification History

Release	Comment
1	This unit replaces RIIRA605A Establish and maintain an underground mine mechanical plant management system
2	Plan and Prepare element added; removed Install element on the basis that this is an Establish and Maintain unit
3	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.

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 completion of establishing and maintenance of an underground mine mechanical plant management system 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
 - using effective communication

- works effectively with others to establish and maintain an underground mine mechanical plant management system 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 the establishment and maintenance of an underground mine mechanical plant management system that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying the relevant information and scope of the work
 - identifying the full range of specification requirements
 - identifying all aspects of the underground mine mechanical plant
- identification and selection of viable options for the establishing and maintenance of an underground mine mechanical plant management system that best meet the required outcomes through:
 - identifying all aspects of flammable environment
 - identifying options to prevent failure of winding and personnel transport equipment
 - identifying options to control hazards and risks relating to mine mechanical plant and equipment, including explosion protection, fire protection and prevention, lifting and towing systems, hazardous substances and the interrelationship between people and mechanical equipment
 - selecting the preferred management system options
 - establishing the audit and review system

Knowledge Evidence

The candidate must demonstrate knowledge in establishing and maintaining an underground mine mechanical plant management system through:

- legislative, organisation and site requirements and procedures for;
 - risk management
 - managing mechanical plant and equipment
 - organisational change and development
 - project management
 - emergency response and disaster planning
 - audit review
 - operating mechanical plant and equipment
 - mine design relating to mine plant, services and infrastructure
 - energy sources, including protection and reticulation systems for electrical, hydraulic, compressed air, diesel
- data from monitoring systems and equipment

- mechanical engineering standards
- safety critical functions of mechanical equipment
- mine design relating to mechanical plant and equipment
- options to prevent failure of winding and personnel transport equipment
- specification for mine plant and equipment
- control hazards and risks relating to mine mechanical plant and equipment, including explosion protection, fire protection and prevention, lifting and towing systems, hazardous substances and the interrelationship between people and mechanical equipment
- mine fires; the types, sources of ignition and possible impacts on plant and equipment
- computer based systems relating to the monitoring, and operation of mine mechanical plant and equipment
- firefighting systems

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	1	1 Year

Mining, Extractive (Quarrying) and Civil Construction	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

Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>