



Australian Government

RIIRAI507D Implement the underground coal mine mechanical plant management plan

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIIRAI507A Implement the underground coal mine mechanical plant management plan
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 implement the underground coal mine mechanical plant management plan in Coal mining.

This unit is appropriate for those working in 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 (underground)

Elements and Performance Criteria

1. Plan and prepare for the implementation of the management plan	1.1 Access, interpret and apply underground coal mine mechanical plant management 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 Access, interpret and clarify the underground mine mechanical plant management plan 1.6 Identify and communicate roles and responsibilities, to all
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	involved persons 1.7 Identify, forecast, obtain and allocate/schedule resources required for the implementation 1.8 Identify training needs and prepare training plans 1.9 Encourage, receive, review and, where appropriate, implement suggestions and recommendations for changes to underground mine mechanical plant management procedures
2. Implement the hazards and risk control options and measures	2.1 Implement procedures for the explosion protection of mechanical equipment 2.2 Implement procedures to control flammable environment 2.3 Implement procedures to control hazards caused by disruption to the mine ventilation system 2.4 Implement fire protection and prevention procedures on mechanical equipment 2.5 Implement procedures to control engine pollutants. initiated from or created by mechanical equipment 2.6 Implement procedures for control of hazardous substances initiated from or used by mechanical equipment 2.7 Implement procedures to maintain the integrity of safety critical functions of mechanical equipment 2.8 Implement procedures to control hazards in lifting and towing systems for mechanical equipment 2.9 Implement procedures to protect people in their interrelationship with mechanical equipment in the underground environment 2.10 Implement procedures to control hazards for energy dissipation and isolation systems on mechanical equipment 2.11 Implement procedures to prevent failure of winding and personnel transport equipment
3. Audit the management plan	3.1 Review the effectiveness of the underground mine mechanical plant management systems in accordance with the requirement of the underground Mine Mechanical Plant Management Plan 3.2 Audit the maintenance program and procedures in accordance with the underground Mine Mechanical Plant Management Plan and statutory requirements 3.3 Audit recording and reporting systems in accordance with the underground Mine Mechanical Plant Management Plan 3.4 Audit the mechanical plant management training program for currency, relevance and compliance with the underground Mine

	Mechanical Plant Management Plan
	3.5 Report audit findings and recommendations

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

IIRAI507A Implement the underground coal mine mechanical plant management plan

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 RIIRAI507D Implement the underground coal mine mechanical plant management plan

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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 implementing of mechanical plant management plans in underground coal mine including:
 - identifying and addressing training needs
 - implementing hazard identification and risks assessment processes
 - managing work planning and coordination activities
 - accessing, interpreting and applying manufacturer's instructions
 - using effective communication
- accessing, interpreting and applying:
 - technical information
 - site/legislative requirements
 - records and reports
 - briefings and handover details
 - data from monitoring systems and equipment
- works effectively with others to implement mechanical plant management plans in underground coal mine including:
 - providing team leadership
 - managing people and processes

- resolving conflict
- coordinating human, financial and physical resources
- developing, initiating and administering work plans
- interpreting and applying operational/implementation performance data
- engaging internal and external stakeholders
- demonstrates completion of implementing of mechanical plant management plans in underground coal mine 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 underground mine mechanical plant
 - identifying and implementing all aspects of the management plans
 - implementing the hazards and risk control options including implementing procedures
 - managing the audit and review processes of the management plan
- identification and selection of viable options for the implementation of underground coal mine mechanical plant management plan that best meet the required outcomes through:
 - identifying the interrelationship with mechanical equipment in the underground environment
- implementing options to control hazards and risks relating to mine mechanical plant and equipment, including:
 - fire protection and prevention
 - lifting and towing systems
 - storage of hazardous substances
 - interrelationship between people and mechanical equipment

Knowledge Evidence

The candidate must demonstrate knowledge in implementing the underground coal mine mechanical plant management plan through:

- legislative, organisation and site requirements and procedures for;
 - mechanical plant and equipment operations
 - emergency response and disaster planning processes
 - audit review
 - mechanical engineering standards
- safety critical function of mechanical equipment
- mine operating procedures for mechanical plant and equipment
- explosion protection techniques
- hazards associated with diesel engines
- energy sources, including protection and reticulation systems for electrical, hydraulic, compressed air, diesel

- preparation for 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
- specification for mine plant and equipment

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.
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*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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