



Australian Government

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.

Application

This unit describes a participant's skills and knowledge required to establish and maintain an underground mine mechanical plant management system 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 (underground)

Elements and Performance Criteria

1. Plan and prepare underground mine mechanical plant management system	1.1 Access, interpret and apply underground mine mechanical plant management system 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 Identify design/selection specifications and critical aspects of the underground mine mechanical plant management system from a
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	comprehensive analysis of operating requirements 1.5 Identify systems options from an analysis of all relevant technical, operational and financial information 1.6 Select the preferred systems options on the basis of performance against specification requirements 1.7 Develop, in consultation, document and have approved policies and system procedures 1.8 Define, document and have approved, roles and responsibilities of all relevant personnel 1.9 Identify, source and provide the resources for the operation of the system
2. Identify, analyse and evaluate hazards and risks associated with the use of mechanical equipment in an underground coal mine	2.1 Identify, evaluate and clarify mine conditions which contribute to explosive atmospheres 2.2 Identify, evaluate and clarify conditions which contribute to flammable environments 2.3 Identify, evaluate and clarify hazards caused by disruption to the mine ventilation system 2.4 Identify, analyse and evaluate hazards and risks relating to mechanical plant
3. Identify, analyse and evaluate hazards and risk control options and measures	3.1 Identify, analyse and evaluate explosion protection control techniques for mechanical equipment 3.2 Identify, analyse and evaluate fire protection and prevention methods and systems on mechanical equipment 3.3 Identify, analyse and evaluate methods and systems to control engine pollutants from mechanical equipment 3.4 Identify, analyse and evaluate methods and systems to control hazardous substances initiated from or used by mechanical equipment 3.5 Develop systems to maintain the integrity of safety critical functions of mechanical equipment 3.6 Develop systems to control hazards for energy dissipation and isolation systems on mechanical equipment 3.7 Develop systems to control hazards in lifting and towing systems for mechanical equipment 3.8 Develop systems to protect people in their interrelationship with mechanical equipment in the underground environment 3.9 Develop systems to prevent failure of winding and personnel transport equipment 3.10 Evaluate the uses of mine monitoring and information systems

	to control hazards and risks on mechanical equipment
4. Establish the mine mechanical plant management system	4.1 Establish mechanical plant objectives, systems, descriptions and responsibilities and incorporate into the mechanical plant management system 4.2 Consult with relevant stakeholders in the development of the mechanical plant management system 4.3 Design mechanical plant management systems to satisfy the operational systems and conditions of the mine 4.4 Incorporate maintenance and inspections systems to ensure the equipment is safe to operate 4.5 Incorporate systems to monitor and test the performance of safety critical functions on mechanical plant and equipment 4.6 Incorporate systems to control noise, dust, other emissions and other hazardous substances 4.7 Incorporate systems to develop safe work procedures 4.8 Incorporate systems for the management of mechanical contractors 4.9 Develop and establish mechanical engineering standards 4.10 Develop and establish mechanical equipment information recording and reporting procedures, including defect reporting and rectification 4.11 Establish a program, including systems and procedures, to satisfy mechanical equipment training requirements 4.12 Incorporate audit and review requirements and update procedures into the mine mechanical plant management system.
5. Audit and review the mechanical plant management system	5.1 Audit mine mechanical engineering standards for compliance with statutory and mine site requirements 5.2 Audit mine mechanical equipment monitoring systems operations for compliance with statutory and mine site requirements 5.3 Audit the maintenance program and procedures for compliance with the Mechanical Plant Management System and statutory requirements 5.4 Audit recording and reporting systems for compliance with the Mechanical Plant Management System 5.5 Audit mechanical plant management training program for currency, relevance and compliance with the requirements of the Mechanical Plant Management System 5.6 Establish procedures for non-compliances revealed by audit and modify the management plan where appropriate

	5.7 Review the Mechanical Plant Management System
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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

No equivalent unit

Links

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