



**Australian Government**

# **RIIRAI611D Establish and maintain a surface mine mechanical plant management system**

**Release: 3**

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## Modification History

| Release | Comment                                                                                                                                                                                                                                                                                                         |
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| 1       | This unit replaces RIIRIS611A Establish and maintain a surface 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.<br>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 a surface 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

## Elements and Performance Criteria

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| 1. Plan and prepare surface mine mechanical plant management system | <p>1.1 Access, interpret and apply surface mine mechanical plant management system documentation and ensure the work activity is compliant</p> <p>1.2 Obtain, read, interpret, clarify and confirm work requirements</p> <p>1.3 Identify and address potential risks, hazards and environmental issues and implement control measures</p> <p>1.4 Identify design/selection specifications and critical aspects of the surface mine mechanical plant management system from a</p> |
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|                                                                                                                            | <p>comprehensive analysis of operating requirements</p> <p>1.5 Identify systems options from an analysis of all relevant technical, operational and financial information</p> <p>1.6 Select the preferred systems options on the basis of performance against specification requirements</p> <p>1.7 Develop, in consultation, document and have approved policies and system procedures</p> <p>1.8 Define, document and have approved, roles and responsibilities of all relevant personnel</p> <p>1.9 Identify, source and provide the resources for the operation of the system</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2. Identify, analyse and evaluate hazards and risks associated with the use of mechanical equipment in a surface coal mine | <p>2.1 Identify, evaluate and clarify mine conditions which contribute to hazardous environments</p> <p>2.2 Identify, analyse and evaluate hazards and risks relating to mechanical plant</p> <p>2.3 Identify, analyse and evaluate hazards and risks relating to fire initiate and/or supported by mechanical equipment</p> <p>2.4 Identify, analyse and evaluate hazards and risks relating to storage of dangerous goods</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 3. Identify, analyse and evaluate hazards and risk control options and measures                                            | <p>3.1 Identify, analyse and evaluate hazardous environment control techniques</p> <p>3.2 Identify, analyse and evaluate fire protection and prevention methods and systems on mechanical equipment</p> <p>3.3 Identify, analyse and evaluate methods and systems to control noise, dust, and other emissions initiated from or created by mechanical equipment</p> <p>3.4 Identify, analyse and evaluate methods for working at heights</p> <p>3.5 Develop systems to maintain the integrity of safety critical functions of mechanical equipment</p> <p>3.6 Develop systems to control hazards in lifting and towing systems for mechanical equipment</p> <p>3.7 Develop systems to control hazards associated with transport equipment and other plant</p> <p>3.8 Develop systems to protect people in their interrelationship with mechanical equipment in the surface environment</p> <p>3.9 Evaluate the uses of mine monitoring and information systems to control hazards and risks on mechanical equipment</p> <p>3.10 Develop systems to control hazards for energy dissipation and</p> |

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|                                                            | <p>isolation systems on mechanical equipment</p> <p>3.11 Identify, analyse and evaluate methods and systems to control hazardous substances initiated from or used by mechanical equipment</p> <p>3.12 Develop systems for the interaction and/or failure of transport and production equipment</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4. Establish the mine mechanical plant management system   | <p>4.1 Establish mechanical plant objectives, systems, descriptions and responsibilities and incorporate into the mine mechanical plant management system</p> <p>4.2 Consult with relevant stakeholders in the development of the mine mechanical plant management system</p> <p>4.3 Design mechanical plant management systems to satisfy the operational systems and conditions of the mine</p> <p>4.4 Incorporate maintenance and inspections systems to ensure the equipment is safe to operate</p> <p>4.5 Incorporate systems to monitor and test the performance of safety critical functions on mechanical plant and equipment</p> <p>4.6 Incorporate systems to control noise, dust, other emissions and other hazardous substances</p> <p>4.7 Incorporate systems to develop safe work procedure</p> <p>4.8 Incorporate systems for the management of mechanical contractors</p> <p>4.9 Develop and establish mechanical engineering standards</p> <p>4.10 Develop and establish mechanical equipment information recording and reporting procedures, including defect reporting and rectification</p> <p>4.11 Establish a program, including systems and procedures, to satisfy mechanical equipment training requirements</p> <p>4.12 Incorporate audit and review requirements and update procedures into the mine mechanical plant management system</p> |
| 5. Audit and review the mechanical plant management system | <p>5.1 Audit mine mechanical engineering standards for compliance with statutory and mine site requirements</p> <p>5.2 Audit the maintenance program and procedures for compliance with the mine mechanical plant management system and statutory requirements</p> <p>5.3 Audit recording and reporting systems for compliance with the mine mechanical plant management system</p> <p>5.4 Audit mechanical plant management training program for currency, relevance and compliance with the requirements of the mine</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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|  | <p>mechanical plant management system</p> <p>5.5 Establish procedures for non-compliances revealed by audit and modify the management plan where appropriate</p> <p>5.6 Review the mine mechanical plant management system</p> |
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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>