



Australian Government

RIIUND603D Manage, operate and maintain the mine ventilation system

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIIUND603A Manage, operate and maintain the mine ventilation system
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

manage, operate and maintain the mine ventilation system in Coal mining.

This unit is appropriate for those working in management roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Coal mining

Elements and Performance Criteria

1. Identify, analyse and evaluate hazards and risks associated with the mine ventilation system	<p>1.1 Access, interpret and apply ventilation management documentation and ensure the work activity is compliant</p> <p>1.2 Identify, analyse and evaluate the sources, hazards and risks of gases and fumes</p> <p>1.3 Identify and evaluate the likelihood and risks of spontaneous combustion</p> <p>1.4 Identify, analyse and evaluate the hazards and risks of airborne and flammable dust</p> <p>1.5 Identify, analyse and evaluate the potential for the impact of wind blast and outburst on the ventilation system</p> <p>1.6 Identify, analyse and evaluate the impacts of fire, ignition and</p>
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	<p>explosion on the ventilation system</p> <p>1.7 Identify, analyse and evaluate the potential for the impact of ventilation pressure differentials</p> <p>1.8 Identify, analyse and evaluate the effect of changes in air temperature and humidity</p> <p>1.9 Identify, analyse and evaluate the causes and effects of re-circulation</p> <p>1.10 Identify, analyse and evaluate the impact associated with disruption to the ventilation system</p> <p>1.11 Identify, analyse and evaluate the impacts of holing into previous workings</p>
<p>2. Identify, analyse and evaluate ventilation control options and measures</p>	<p>2.1 Identify, analyse and evaluate the types, applications and limitations of the ventilation control devices</p> <p>2.2 Identify, analyse and evaluate the impact of mine design on ventilation system</p> <p>2.3 Identify, analyse and evaluate the methods, purposes and limitations of mine monitoring systems and processes</p> <p>2.4 Identify, analyse and evaluate inertisation techniques and applications</p> <p>2.5 Identify, analyse and evaluate the impact of seam gas management on the ventilation system</p> <p>2.6 Identify, analyse and evaluate the impact of water management on the ventilation system</p>
<p>3. Contribute to the development and maintenance of the mine ventilation management plan</p>	<p>3.1 Identify, analyse and confirm the objectives and criteria for safe and effective ventilation</p> <p>3.2 Incorporate the principles and requirements of mine ventilation into the mine development plan</p> <p>3.3 Identify, analyse and evaluate the requirements for mine fans and make appropriate selections</p> <p>3.4 Evaluate and apply design criteria and specifications for ventilation networks and individual circuits</p> <p>3.5 Evaluate ventilation control device options against requirements and select best option</p> <p>3.6 Establish design criteria for ventilation and environmental monitoring systems and make appropriate selections</p> <p>3.7 Prepare and incorporate procedures for the installation, establishment and operation of ventilation management systems</p> <p>3.8 Develop a system for early warning for each identified hazard</p>

	<p>including action requirements for each event and incorporate</p> <p>3.9 Formulate and implement maintenance program and procedures</p> <p>3.10 Incorporate procedures for the audit, review and updating of the ventilation system</p> <p>3.11 Identify ventilation training requirements and incorporate</p>
4. Implement mine ventilation monitoring, recording and reporting systems	<p>4.1 Implement procedures for monitoring, recording and reporting on the ventilation system</p> <p>4.2 Implement procedures for the installation and operation of monitoring systems and equipment</p> <p>4.3 Implement procedures for the collection and analysis of ventilation data</p> <p>4.4 Process, record and report monitoring system data</p> <p>4.5 Interpret measured data and compare with statutory requirements and the ventilation management plan and action requirements</p> <p>4.6 Include the periodic review of alarm settings and alarms raised in the ventilation management plan and implement</p>
5. Coordinate and control the maintenance of and changes to the mine ventilation system	<p>5.1 Review, confirm and communicate the ventilation system maintenance program to responsible parties</p> <p>5.2 Coordinate maintenance activities, including inspections, repair and maintenance</p> <p>5.3 Implement the system of recording and reporting maintenance requirements and activities</p> <p>5.4 Plan, control and implement changes to the ventilation system</p> <p>5.5 Prepare and maintain mine ventilation plans</p>
6. Audit and review the effectiveness of the mine ventilation system	<p>6.1 Audit the effectiveness of the ventilation system</p> <p>6.2 Ensure that ventilation control devices comply</p> <p>6.3 Ensure that ventilation standards comply</p> <p>6.4 Operate mine monitoring systems</p> <p>6.5 Maintain ventilation recording systems accurately and process data</p> <p>6.6 Implement and record ventilation system maintenance program and procedures</p> <p>6.7 Communicate the content of the ventilation management plan to the workforce and ensure that it is understood</p> <p>6.8 Review the ventilation system</p>

	<p>6.9 Ensure that the emergency plans are consistent with the ventilation management plan</p> <p>6.10 Ensure that the ventilation standards remain appropriate</p> <p>6.11 Ensure that the training of mine employees is current, relevant and is conducted</p> <p>6.12 Identify, assess and incorporate future ventilation requirements into the ventilation planning procedures</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

RIIUND603A Manage, operate and maintain the mine ventilation system

Links

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