



**Australian Government**

# **RIUND601D Establish and maintain the ventilation management system**

**Release: 2**

# RIIUND601D Establish and maintain the ventilation management system

## Modification History

Release	Comment
1	This unit replaces RIIUND601A Establish and maintain the ventilation management 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

This unit describes a participant's skills and knowledge required to establish and maintain the ventilation management system in Coal and Metalliferous 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

Metalliferous mining

## Elements and Performance Criteria

1. Identify, analyse and evaluate hazards associated with mine atmosphere	1.1 Access, interpret and apply ventilation management documentation and ensure the work activity is compliant 1.2 Identify and evaluate the sources and hazards of dust, gases and fumes 1.3 Identify, analyse and evaluate the likely impact of gas drainage 1.4 Identify, analyse and evaluate the hazards of spontaneous combustion, fire and explosion 1.5 Identify, analyse and evaluate the impact of ventilation pressure differentials
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	1.6 Identify, analyse and evaluate the effect of changes in air temperature, pressure and humidity
2. Identify, analyse and evaluate events which impact on ventilation	<p>2.1 Identify and evaluate the impact of disruption to the ventilation system</p> <p>2.2 Identify and evaluate the causes and effects of recirculation</p> <p>2.3 Identify, analyse and evaluate the potential for and likely impact of windblast</p> <p>2.4 Identify, analyse and evaluate the potential for and likely impact of outburst</p> <p>2.5 Identify, analyse and evaluate the impacts of holing into previous workings</p> <p>2.6 Identify, analyse and evaluate the impact of water</p> <p>2.7 Identify, analyse and evaluate the potential for, and likely impact of spontaneous combustion, fires and explosion</p>
3. Identify, analyse and evaluate mine ventilation control options and measures	<p>3.1 Identify, analyse and evaluate the types, applications and limitations of the ventilation control devices</p> <p>3.2 Identify and evaluate the impact of mine design on the ventilation system</p> <p>3.3 Identify and evaluate the methods, purposes and limitations of mine monitoring systems and processes</p>
4. Design and develop the ventilation management system	<p>4.1 Access, interpret and clarify the relevant legislative and site requirements</p> <p>4.2 Incorporate the principles and requirements of mine ventilation, including the effects of mine gases into the design and development of the ventilation system</p> <p>4.3 Identify design criteria and specification for ventilation networks and incorporate</p> <p>4.4 Identify, evaluate and incorporate the requirement for mine fans</p> <p>4.5 Evaluate ventilation control device options against requirements and incorporate</p> <p>4.6 Incorporate ventilation and environmental monitoring systems</p>
5. Establish the ventilation management plan	<p>5.1 Establish and incorporate mine ventilation objectives, systems descriptions and responsibilities into the ventilation management plan</p> <p>5.2 Establish procedures for the installation, operation and maintenance of ventilation monitoring systems</p> <p>5.3 Prepare and establish procedures for the installation, operation and changes to ventilation control devices</p>

	<p>5.4 Determine trigger levels for each hazard and incorporate</p> <p>5.5 Establish a ventilation system maintenance program and procedures and incorporate</p> <p>5.6 Incorporate audit, review and update procedures for the ventilation systems</p> <p>5.7 Establish a program including systems and procedures to satisfy identified ventilation management training requirements</p> <p>5.8 Establish a procedure for planning, controlling, implementing, recording and communicating changes to mine ventilation systems and components and incorporate</p>
<p>6. Plan and prepare for the implementation of the ventilation management plan</p>	<p>6.1 Identify and interpret the relevant legislative and site requirements</p> <p>6.2 Access and interpret the ventilation management plan</p> <p>6.3 Identify, clarify and communicate roles and responsibilities</p> <p>6.4 Identify, forecast, obtain and allocate/schedule required resources</p> <p>6.5 Implement the ventilation management training program</p> <p>6.6 Encourage, receive, review and, where appropriate, implement suggestions and recommendations for changes to ventilation management implementation procedures</p>
<p>7. Audit and review the ventilation management plan</p>	<p>7.1 Audit ventilation standards for compliance</p> <p>7.2 Audit ventilation control devices for compliance</p> <p>7.3 Audit monitoring systems for compliance</p> <p>7.4 Audit ventilation recording systems for compliance =</p> <p>7.5 Audit ventilation system maintenance program and procedures for compliance</p> <p>7.6 Audit the ventilation management training program for currency, relevance and compliance</p> <p>7.7 Audit and review the planning process of future ventilation requirements</p> <p>7.8 Identify and correct non-compliance or other discrepancies/deficiencies revealed by audit</p>

## 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

RIIUND601A Establish and maintain the ventilation management system

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>