



Australian Government

RIIMCU501D Implement the spontaneous combustion management plan

Release: 2

RIIMCU501D Implement the spontaneous combustion management plan

Modification History

Release	Comment
1	This unit replaces RIIMCU501A Implement the spontaneous combustion 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 spontaneous combustion management plan in Coal mining

This unit is appropriate for those working in supervisory 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 (Underground)

Elements and Performance Criteria

1. Identify and apply resources to the spontaneous combustion management plan	1.1 Access, interpret and apply the spontaneous combustion management plan documentation, and ensure the work activity is compliant 1.2 Identify and address potential risks, hazards and environmental issues and implement control measures 1.3 Identify and implement appropriate response procedures in situations where trigger levels are reached 1.4 Review spontaneous combustion procedures, implement identified improvements 1.5 Implement identified spontaneous combustion management
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	plan training requirements
2. Implement mine atmosphere monitoring measures	2.1 Implement procedures for installation, operation and maintenance of monitoring systems 2.2 Implement systems and procedures for the collection of mine gas samples
3. Monitor and respond to spontaneous combustion indicators	3.1 Implement the system for identification of and inspections for spontaneous combustion indicators 3.2 Monitor sensory spontaneous combustion indicators, analyse and investigate variations, and implement appropriate corrective action 3.3 Monitor gaseous spontaneous combustion indicators, analyse and investigate variations, and implement appropriate corrective action 3.4 Process records and reports in accordance with the plan 3.5 Implement emergency and evacuation procedures in accordance with the safety management system
4. Implement spontaneous combustion control measures	4.1 Implement ventilation control measures in accordance with the spontaneous combustion management plan 4.2 Implement ventilation monitoring systems and surveys to assess the status of the systems 4.3 Incorporate into the development of the system water management measures to minimise the risk of spontaneous combustion 4.4 Implement inertisation as required and in accordance with the established plan 4.5 Implement response actions and review effectiveness and currency 4.6 Implement systems to prevent and/or respond immediately to the intersection of current and other working
5. Audit spontaneous combustion control measures	5.1 Audit the effectiveness of control measures and amend the procedures/measures as required

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

RIIMCU501A Implement the spontaneous combustion 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 RIIMCU501D Implement the spontaneous combustion 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 the procedures and techniques for the safe, effective and efficient implementation of the spontaneous combustion management plan including:
 - accessing, interpreting and applying:
 - technical information
 - site / legislative requirements
 - records and reports
 - briefings and handover details
 - applying the principles of mine design
 - inspecting, monitoring, analysing and recording data related to the management of spontaneous combustion
 - assessing the risks and consequences of spontaneous combustion
 - preparing technical report
- works with other to plan, prepare and coordinate the implementation of the spontaneous combustion management plan by:
 - communicating clearly and concisely with others to receive and clarify work instructions, and convey work progress
 - identify training needs related to spontaneous combustion
 - identifying the relevant information and scope of the work necessary to meet the required outcomes

- demonstrates completion of implementing the spontaneous combustion management plan that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - developing procedures appropriate to mine operations for management of spontaneous combustion
 - implementing mine atmosphere monitoring measures
 - monitoring and responding to spontaneous combustion indicators
 - implementing spontaneous combustion control measures
 - auditing spontaneous combustion control measures

Knowledge Evidence

The candidate must demonstrate knowledge of implementing the spontaneous combustion management plan through:

- identifying and monitoring causes and effects of spontaneous combustion
- identifying the effects of coal seam characteristics, depositional factors and geological conditions on spontaneous combustion
- identifying the principles of mine design, including:
 - geological data
 - strata control
 - underground water management
 - sealing design
 - inertisation principles and techniques
- identifying the principles of ventilation management, including:
 - mine gases and gas management
 - mine atmosphere monitoring
 - mine and goaf ventilation systems
 - ventilation structures
- assessing mine design and plan relating to spontaneous combustion
- identifying spontaneous combustion management plan requirements including:
 - methods of control of spontaneous combustion
 - spontaneous combustion risks and hazards
 - spontaneous combustion indicators and ratios
 - identifying and applying emergency response and evacuation/disaster planning processes and techniques

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.	

*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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