



Australian Government

RIIMCU402D Apply spontaneous combustion management measures

Release: 3

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Modification History

Release	Comment
1	This unit replaces RIIMCU402A Apply spontaneous combustion management measures
2	Plan and Prepare element added to Performance Criteria; Inserted Modification History
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 apply spontaneous combustion management measures in Coal mining.

This unit is appropriate for those working in supervisory or technical specialist 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. Plan and prepare to apply spontaneous combustion management measures	1.1 Access, interpret and apply spontaneous combustion management measures, 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 Select and wear appropriate personal protective equipment and protective clothing 1.5 Access, read, interpret and apply mine environmental,
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	geological and survey data required to complete the allocated work 1.6 Obtain and interpret emergency procedures and be prepared for fire/accident/emergency
2. Identify and recognise hazards	2.1 Identify the fundamentals of spontaneous combustion 2.2 identify hazards related to mine gases and variations in barometric pressure 2.3 Identify the effects of mine ventilation structures and the potential to bring about spontaneous combustion 2.4 Identify and clarify physical spontaneous combustion indicators relevant to the work area 2.5 Identify and clarify gaseous spontaneous combustion indicators relevant to the work area. 2.6 Identify the range of causes of spontaneous combustion hazards related to the underground coal stowage and conveyor systems
3. Identify and clarify operational requirements and control measures	3.1 Identify methods and purposes of the mine atmosphere monitoring systems 3.2 Identify the methods and purposes of control measures for the elimination or minimisation of spontaneous combustion risks
4. Implement and contribute to spontaneous combustion management measures	4.1 Monitor and report on the spontaneous combustion status of the local work area 4.2 Minimise hazards associated with the stowage of coal through: inspections and monitoring; maintenance of high standards of housekeeping; timely reporting of situations requiring further actions 4.3 Identify and report errors or omissions in spontaneous combustion procedures

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>

Assessment Requirements for RIIMCU402D Apply spontaneous combustion management measures

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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 requirements, procedures and techniques for the safe, effective and efficient completion of the application of spontaneous combustion management measures including:
 - accessing, interpreting and applying general information on spontaneous combustion
 - recognising and reporting incidents and potential hazards associated with spontaneous combustion
 - identifying mine ventilation structures
- works effectively with others to plan, prepare and conduct the application of spontaneous combustion management measures including:
 - organising work activities to meet all task requirements
 - communicating clearly and concisely with others to receive and clarify work instructions
 - complying with written and verbal reporting requirements and procedures
 - resolving coordination requirements throughout work activities
- demonstrates completion of spontaneous combustion management measures that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:

- application of mine atmosphere monitoring systems such as;
 - continuous monitoring
 - portable (hand held) monitoring
 - collection of bag samples
 - gas chromatography
 - ventilation measurements
 - status monitoring, including:
 - physical indications of spontaneous combustion
 - gaseous indications of spontaneous combustion
 - changes in ventilation conditions
 - defective seals
- application of control measures for the elimination or minimisation of spontaneous combustion risks, such as:
 - grouting
 - digging-out
 - sealing
 - water infusion
 - inertisation

Knowledge Evidence

The candidate must demonstrate knowledge of applying spontaneous combustion management measures through:

- accessing, interpreting and applying legislative, organization and site requirements and procedures for:
 - work health and safety
 - environmental issues
 - hazard and risk assessment
 - mine operational activities
 - housekeeping
- identifying and managing mine gases
- spontaneous combustion causes and hazards
- applying spontaneous combustion management plan requirements
- mine ventilation structures
- reading, interpreting and applying geological data
- addressing and reporting environmental issues, potential hazards and risks
- applying gas monitoring systems
- spontaneous combustion indicators
- reporting measures with respect to spontaneous combustion
- equipment characteristics, capabilities and limitations
- being prepared for fire/accident/emergency

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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