



Australian Government

RIIMCU407D Apply and monitor the strata management plan

Release: 3

RIIMCU407D Apply and monitor the strata management plan

Modification History

Release	Comment
1	This unit replaces RIIMCU407A Apply and monitor the strata management plan
2	Corrected Performance Criteria numbering
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 and monitor the strata management plan 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 (Underground)

Elements and Performance Criteria

1. Plan and prepare for the application and monitoring of the strata management plan	1.1 Access, interpret and apply strata management plan documentation, and ensure the work activity is compliant 1.2 Identify, clarify and communicate roles and responsibilities 1.3 Identify obtain and allocate resources required for the application of the strata management plan 1.4 Identify individual training needs and prepare training plans 1.5 Identify and interpret the risks associated with unstable mining structures
2. Apply the strata management plan	2.1 Communicate, apply and monitor site mining system 2.2 Communicate and apply primary, secondary and other support

	systems 2.3 Identify and assess the impact of mining on the stability of mining structures 2.4 Install, monitor and assess strata support systems 2.5 Install, monitor and assess strata monitoring devices 2.6 Identify and assess strata supports and failure mechanisms and apply appropriate controls 2.7 Apply, monitor and record mining sequences 2.8 Identify and assess and record stress changes in the mining structure 2.9 Identify, assess and record geological structures encountered during the mining process 2.10 Apply action response plans 2.11 Apply and monitor site procedures relating to strata management 2.12 Participate in audit and review requirements 2.13 Implement training plans
3. Apply monitoring and maintenance procedures	3.1 Carry out inspection and ensure that repair and maintenance activities are conducted in accordance with strata management plan 3.2 Record, report and review maintenance and monitoring requirements and activities

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

RIIMCU407A Apply and monitor the strata 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 RIIMCU407D Apply and monitor the strata 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 requirements, procedures and techniques for the safe, effective and efficient completion of strata management plan application and monitoring including:
 - reading, interpreting, communicating and applying technical information
 - accessing and interpreting data from monitoring systems and equipment
 - accessing and analysing historical strata management information related to the mine and failure mode of mine structures
 - interpreting and applying design criteria for strata management
 - conducting enquiries/investigations and preparing audit reports
 - identifying training needs, and preparing and implementing training plans
- works effectively with others to plan, prepare and conduct strata management plan application and monitoring that meets all of the required outcomes 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 applying and monitoring the strata management plan that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identifying the factors affecting stability of mining structures such as:
 - roadway size
 - pillar sizes
 - depth of cover
 - strength of coal and underlying/overlying strata
 - stress regimes
 - strata characteristics
 - longwall chocks
 - presence of water
 - systems of mining
 - breaker line supports
 - direction of mining
 - sequence of pillar extraction
 - primary and secondary support
 - geological structures
 - speed and continuity of extraction
 - applying strata monitoring devices such as:
 - convergence indicators
 - extensometers
 - load cells
 - stress cells

Knowledge Evidence

The candidate must demonstrate knowledge of applying and monitoring the strata management plan through:

- accessing, interpreting and applying legislative, organization and site requirements and procedures for:
 - accessing and interpreting mine plans, ventilation, gas monitoring, strata support and safety management plans
 - identifying and managing environmental issues, hazards and risks
- identifying systems of underground mining including:
 - tunnels, drifts, stone drivage, shaft sinking, pillar extraction, partial extraction, punch mining and fault drivage
 - identifying exploration techniques
 - identifying strata support and monitoring systems
 - identifying geology and strata gas characteristics
- identifying factors affecting stability of mining structures including:

- stress: including mining induced stress, vertical and horizontal stress, tectonics, virgin stress, topographical features
- sedimentology: including subsidence, water bearing strata, permeability of seam and strata, hydrology, rock property testing, caving characteristics, windblast, faults, dykes, outburst, gas content and over and underlying strata
- mining structure failure modes
- identifying systems of work: including bord and pillar, place changing, longwall, highwall, auger mining, pillar extraction, partial extension and punch mining
- 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	3-6	3 Years

(Quarrying)		
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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