



Australian Government

**RIIMCU606E Establish and maintain the
mining method and strata management
systems**

Release: 1

RIIMCU606E Establish and maintain the mining method and strata management systems

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 5.0.

Application

This unit describes the skills and knowledge required to establish and maintain mining methods and strata management systems in underground coal mining, including design, development, audit and review processes and procedures.

It applies to those working in management roles. They generally perform complex, non-routine tasks involving strategic and planning activities and are responsible for establishing and maintaining operational systems and plans.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories and industry sectors. Users must check requirements with relevant body before applying the unit.

Unit Sector

Coal mining (underground)

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Plan and prepare to establish and maintain mining method and strata management system	1.1 Access, interpret and apply mining method and strata management documentation 1.2 Identify and record resources required to create and maintain a stable mining structure 1.3 Identify and evaluate historical mine site information relating to strata management 1.4 Identify, assess and record possible mining structure failure modes relevant to mine site 1.5 Determine criteria for establishing the stability of mining structures

ELEMENT	PERFORMANCE CRITERIA
	<p>according to site requirements</p> <p>1.6 Identify hazards and analyse risks associated with failures of mining structures</p> <p>1.7 Identify and assess the limitations and controls applying to design of stable mining structures</p>
<p>2. Identify and evaluate geological and geotechnical information to establish stable mining structures</p>	<p>2.1 Identify and determine exploration techniques for gathering information relating to geological, hydrological and geotechnical conditions</p> <p>2.2 Identify and evaluate geological, geotechnical and hydrological information, with respect to stable mining methods</p> <p>2.3 Identify and evaluate strata gas information, with respect to stable mining methods</p> <p>2.4 Identify and evaluate roof, seam and floor lithological and physical properties information, with respect to stable mining methods</p> <p>2.5 Identify and evaluate stress regimes information, with respect to stable mining methods</p>
<p>3. Identify and evaluate mining engineering principles and practices</p>	<p>3.1 Identify and evaluate mining system types and methods according to site requirements</p> <p>3.2 Identify potential layouts for stable mining structures according to engineering analysis and site requirements</p> <p>3.3 Identify and evaluate mining constraints relating to development of stable mining structure</p> <p>3.4 Identify and evaluate equipment required for development and maintenance of stable mining structure</p> <p>3.5 Identify effects of mining induced subsidence on surface areas</p>
<p>4. Identify, evaluate and determine strata control systems</p>	<p>4.1 Identify, evaluate and determine ground support systems according to site requirements</p> <p>4.2 Identify, evaluate and determine ground support installation and monitoring systems according to site requirements</p> <p>4.3 Identify and evaluate strata failure mechanisms according to site requirements</p> <p>4.4 Identify and evaluate natural and induced stress control methods according to site requirements</p>
<p>5. Establish strata management system</p>	<p>5.1 Design and establish methods of entry to the coal seam according to site requirements</p> <p>5.2 Design and establish systems of mining according to site requirements</p> <p>5.3 Design and establish sequences for mining operations according to site requirements</p> <p>5.4 Design and establish strata management procedures according to site requirements</p>

ELEMENT	PERFORMANCE CRITERIA
	5.5 Identify training needs and confirm training plan is established according to site requirements 5.6 Establish action response plans for management of strata movement according to site requirements
6. Plan and prepare to implement mining method and strata management systems	6.1 Access, interpret and clarify the mining method and strata management system 6.2 Identify and communicate roles and responsibilities to all personnel according to strata management plan 6.3 Identify, forecast, obtain and allocate/schedule resources required to implement strata management plan 6.4 Develop the monitoring and review processes for strata management system according to site requirements
7. Establish process to audit strata management system	7.1 Audit mining structures for stability according to site requirements 7.2 Audit monitoring systems according to site requirements 7.3 Audit compliance to action response plans according to site requirements 7.4 Audit recording and reporting systems according to site requirements 7.5 Audit maintenance program and procedures according to site requirements 7.6 Audit training plan according to site requirements 7.7 Establish procedures for response to instances of non-compliance or other discrepancies/deficiencies revealed by audit

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Oral communication	<ul style="list-style-type: none"> Conveys information and requirements clearly and listens actively
Reading	<ul style="list-style-type: none"> Identifies and interprets relevant information from workplace procedures, documentation and legislation
Writing	<ul style="list-style-type: none"> Prepares specific information that complies with a range of requirements, using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIMCU606D Establish and maintain the mining method and strata management systems.

Links

Companion Volume Implementation Guide is found on VETNet -

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