



Australian Government

Department of Education, Employment and Workplace Relations

RIIMCU301A Conduct specialised strata control operations

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers conducting specialised strata control operations in coal mining industries. It includes planning and preparing for work, installing and securing supports, and carrying out operator maintenance on equipment. 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.

Application of the Unit

This unit is appropriate for those working in an operational role, at worksites within:

- Coal mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for work	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Access, interpret and apply mine environmental, geological and survey data required to complete the allocated work 1.3. Determine, obtain and transport resources required for the work to the worksite
2. Install and secure supports	2.1. Resolve coordination activities with others at the site prior to commencement of, and during, the work activity 2.2. Carry out equipment, materials and services check in accordance with the work plan, site and legislative requirements 2.3. Pre-start, start-up, park-up and shutdown procedures on equipment/plant in accordance with manufacturer's instructions and/or site procedures 2.4. Scale down roof and ribs prior to commencing operation 2.5. Drill holes for rib/roof bolt installation in accordance with manufacturer and/or site requirements 2.6. install and secure support in accordance with manufacturer and/or site and legislative requirements 2.7. Identify/monitor and respond to changing geological conditions in accordance with site procedures 2.8. Recognise hazardous and emergency situations in accordance with manufacturer's instructions and/or site procedures
3. Carry out operator maintenance on equipment	3.1. Carry out equipment inspections and fault finding in accordance with manufacturer's instructions and/or site requirements 3.2. Carry out routine operational servicing, lubrication and housekeeping tasks in accordance with manufacturer's instructions and/or site procedures and practices 3.3. Carry out minor maintenance to manufacturer's instructions and/or site

	requirements 3.4. Provide operator support during preparation for, and conduct of, maintenance tasks in accordance with site requirements 3.5. Process records in accordance with site requirements
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Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which this unit may be used. This includes the ability to carry out the following, as required to conduct specialised strata control operations:

- apply legislative, organisation and site requirements and procedures for specialised strata control operations
- apply operational safety requirements
- access, interpret and apply technical information
- read and interpret mine plans
- identify specialised support equipment and materials
- communicate orally
- coordinate team work
- identify hazards
- operate specialised support equipment
- install specialised supports
- use relevant hand tools

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly for its application in the various circumstances in which the unit may be used. This includes knowledge of the following, as required to conduct specialised strata control operations:

- statutory requirements for support
- site personnel and equipment safety requirements
- manager's support rules/plan
- types, uses and limitations of specialised strata control systems
- equipment characteristics, technical capabilities and limitations
- support installation procedures
- site ventilation procedures
- strata hazard identification techniques
- geological and survey data
- site environmental requirements and constraints related to specialised support operations
- Hazchem related to support operations

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for conducting specialised strata control operations • implementation of requirements, procedures and techniques for the safe, effective and efficient completion of specialised strata control operations • working with others to undertake and complete the specialised strata control operations in a way that meets all of the required outcomes • consistent timely completion of specialised strata control operations that safely, effectively and efficiently meets the required outcomes
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those

	required on the job. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistent achievement of required outcomes • first hand testimonial evidence of the candidate's: • working with others to undertake and complete the specialised strata control operations
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Relevant compliance documentation may include:	• legislative, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation • management plans • OHS policy
Work requirements may be in the form of:	• shift briefings • handover details • work orders
Work instructions may include:	• nature and scope of task • next support sequence • achievement targets • survey data • geological conditions • defects on equipment/plant • hazards • potential hazards • coordination requirements/issues
Mine environmental, geological and survey data may be in the form of:	• ventilation/gas data • deputy reports • geological hazard plan • longitudinal and cross sectional survey plans
Resources required for the allocated work may include:	• support materials • equipment/plant • power and water • personnel
Supports covered by this unit may include:	• cable bolts • flexibolts • mega-bolts • polyurethane injection

	• shotcrete • arching/square sets • cogs (timber, fibre, crib, cans) • spialling/fore poling
Monitor may include:	• telltales • extensometer • visually or electronically measured • convergence measurements
Hazards and potential hazards may include:	• personal injury • limited vision • gas accumulation • roof, rib and floor conditions • falls • chemical hazards • compressed air • hydraulic pressure • dust • heat
Operator (operational) maintenance procedures are:	• those established and authorised for the site

Unit Sector(s)

Coal Mining (Underground)

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.