



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **RIIMCO302A Conduct surface miner operations**

**Release: 1**

## RIIMCO302A Conduct surface miner operations

### Modification History

Not applicable.

### Unit Descriptor

This unit covers the conduct of surface miner operations in the coal industry. It includes planning and preparing for operations, operating the surface miner, and carrying out operator maintenance. 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 operations	1.1. Access, interpret and apply <b>compliance documentation</b> relevant to the work activity 1.2. Access, interpret and apply geological and survey data required to complete the allocated work
2. Operate surface miner	2.1. Resolve coordination activities with others at the site prior to commencement of, and during, the work activity 2.2. Carry out pre-start, start-up, park-up and shutdown procedures 2.3. Conduct, control and monitor mining procedures, milling, loading and manoeuvring 2.4. Select required <b>loading method</b> , drive-by or other appropriate method, and position the equipment and <b>haulage units</b> to meet this requirement 2.5. Act on monitoring systems and report on alarms 2.6. Recognise and respond to hazardous and emergency situations 2.7. Complete work in accordance with the agreed plan and outcomes and within the operating capacities of the allocated equipment
3. Carry out operator maintenance	3.1. Carry out <b>surface miner</b> inspections and fault-finding 3.2. Carry out routine operational servicing, lubrication and housekeeping tasks 3.3. Carry out minor maintenance 3.4. Provide operator support during preparation for, and conduct of, major maintenance tasks 3.5. Process records

## 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 surface miner operations:

- apply legislative, organisation and site requirements and procedures for conducting surface miner operations
- apply legislative, organisation and site requirements and procedures for conducting surface miner operations
- apply operational safety requirements
- access, interpret and apply technical information
- maintain records
- apply hand-eye coordination
- use relevant hand tools
- apply diagnostic techniques
- apply environmental constraints in surface miner operations
- dispose of environmentally sensitive fluids and materials

### Required knowledge

Specific knowledge is 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 knowledge of the following, as required to conduct surface miner operations:

- site and equipment safety requirements
- mining systems and site procedures
- miner characteristics, technical capabilities and limitations
- surface miner operational procedures
- basic geological and survey data
- surface miner maintenance systems and procedures
- hazard identification and response procedures
- site environmental requirements and constraints related to surface miner operations

## Evidence Guide

<p>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.</p>	
<p><b>Overview of assessment</b></p>	
<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>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:</p> <ul style="list-style-type: none"> <li>• knowledge of the requirements, procedures and instructions for conducting surface miner operations</li> <li>• implementation of requirements, procedures and techniques for the safe, effective and efficient completion of surface miner operations</li> <li>• working with others to undertake and complete the surface miner operations in a way that meets all of the required outcomes</li> <li>• consistent timely completion of surface miner operations that safely, effectively and efficiently meets the required outcomes</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> </ul>

	<ul style="list-style-type: none"> <li>• Customisation of assessment and delivery environment to sensitively accommodate cultural diversity.</li> <li>• Aboriginal people and other people from a non English speaking background may have second language issues.</li> <li>• 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.</li> </ul>
<b>Method of assessment</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of the candidate's required knowledge</li> <li>• observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes</li> <li>• consistent achievement of required outcomes</li> </ul> </li> <li>• first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> <li>• working with others to undertake and complete the surface miner operations</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

## Range Statement

<p>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.</p>	
<p><b>Relevant compliance documentation</b> may include:</p>	<ul style="list-style-type: none"> <li>• legislative, organisational and site requirements and procedures</li> <li>• manufacturer's guidelines and specifications</li> <li>• management plans</li> <li>• OHS policy</li> <li>• Australian standards</li> <li>• Employment and workplace relations legislation</li> <li>• Equal Employment Opportunity and Disability Discrimination legislation</li> </ul>
<p><b>Surface miners</b> may be:</p>	<ul style="list-style-type: none"> <li>• diesel electrical</li> <li>• diesel mechanical</li> </ul>
<p><b>Work requirements</b> may include:</p>	<ul style="list-style-type: none"> <li>• nature and scope of work</li> <li>• working conditions</li> <li>• achievement targets</li> <li>• site lighting arrangements</li> <li>• defects on machine</li> <li>• hazards and potential hazards</li> <li>• coordination requirements/issues</li> </ul>
<p><b>Specific safety requirements</b> are to include:</p>	<ul style="list-style-type: none"> <li>• boarding and disembarking procedures</li> <li>• lowering of implements</li> <li>• relocating</li> <li>• operational signal procedures</li> </ul>
<p><b>Loading methods</b> may include:</p>	<ul style="list-style-type: none"> <li>• drive-by</li> <li>• single and double side</li> <li>• windrow stockpiling</li> </ul>
<p><b>Haulage units</b> may include:</p>	<ul style="list-style-type: none"> <li>• rear dump</li> <li>• belly dumps</li> <li>• road trucks</li> </ul>
<p><b>Surface miner</b> operations are to include mining coal and roadworks and may include:</p>	<ul style="list-style-type: none"> <li>• material removal</li> <li>• road profiling</li> <li>• boxing out</li> <li>• milling to correct mining depths and horizons</li> <li>• responding to changes in depth</li> </ul>

	<ul style="list-style-type: none"><li>• grade and cross fall</li><li>• loading and manoeuvring</li></ul>
<b>Operator maintenance is:</b>	<ul style="list-style-type: none"><li>• those maintenance activities established and authorised for the site</li></ul>

## **Unit Sector(s)**

Coal Mining (Open Cut)

## **Competency field**

Refer to Unit Sector(s).

## **Co-requisite units**

Not applicable.