



**Australian Government**

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

# **RIIMCU306A Conduct shearer operations**

**Release: 1**

## RIIMCU306A Conduct shearer operations

### Modification History

Not applicable.

### Unit Descriptor

This unit covers the conduct of shearer operations in the coal industry. It includes: planning and preparing, shearing and loading coal, and conducting 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 operations	1.1. Access, interpret and apply <i>compliance documentation</i> relevant to the work activity 1.2. Obtain, interpret and clarify/confirm <i>work requirements</i> before proceeding 1.3. Access, interpret and apply <i>mine environment, geological and survey data</i> required to complete the allocated work in accordance with site procedures
2. Shear and load coal	2.1. Resolve <i>coordination</i> activities with others at the site prior to commencement of, and during, the work activity 2.2. Carry out pre-start, start-up, shutdown and isolation procedures in accordance with manufacturer instructions and/or site procedures 2.3. Operate shearer in accordance with manufacturer instructions and/or site procedures to shear and load coal 2.4. Cut longwall face to sequence and site conditions, maintaining horizon and quality control in accordance with extraction plan 2.5. Act on or report monitoring systems and alarms in accordance with site procedures 2.6. Carry out parking of shearer in accordance with manufacturer instructions and/or site procedures and maintenance plan 2.7. Recognise and respond to hazardous and <i>emergency situations</i> in accordance with manufacturer instructions and/or site procedures
3. Conduct <b>operator maintenance</b>	3.1. Carry out shearer inspections and fault finding in accordance with manufacturer instructions and/or site requirements 3.2. Carry out routine operational servicing, lubrication and housekeeping tasks in accordance with manufacturer instructions and/or site procedures and practices 3.3. Carry out minor maintenance to manufacturer instructions and/or site requirements 3.4. Provide operator support during

	<p>preparation for, and conduct of, maintenance tasks in accordance with site requirements</p> <p>3.5.Process records in accordance with site requirements</p>
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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 shearer operations:

- apply legislative, organisation and site requirements and procedures for shearer operations
- apply operational safety requirements
- access, interpret, apply and communicate technical information
- interpret survey and geological data
- apply hand eye coordination
- apply diagnostic and fault finding techniques
- use hand tools
- maintain equipment records
- comply with environmental requirements

### 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 shearer operations:

- site operational safety procedures
- longwall operational processes and procedures
- shearer operational procedures
- shearer equipment characteristics and limitations
- mine geology and survey information
- mine ventilation systems
- shearer maintenance systems and procedures
- site environmental requirements and constraints relevant to the shearer

## 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 shearer operations</li> <li>• implementation of requirements, procedures and techniques for the safe, effective and efficient completion of shearer operations</li> <li>• working with others to undertake and complete the shearer operations that meets all of the required outcomes</li> <li>• consistent timely completion of shearer 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> <li>• Customisation of assessment and delivery</li> </ul>

	<p>environment to sensitively accommodate cultural diversity.</p> <ul style="list-style-type: none"> <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 shearer operations</li> </ul> </li> </ul>
<b>Guidance information for assessment</b>	<p>Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.</p>

## 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>Work requirements</b> may be in the form of:</p>	<ul style="list-style-type: none"> <li>• shift briefings</li> <li>• handover details</li> <li>• work orders</li> </ul>
<p><b>Work requirements</b> may be in the form of:</p>	<ul style="list-style-type: none"> <li>• equipment, including any defects</li> <li>• cutting height</li> <li>• next cutting sequence</li> <li>• achievement targets</li> <li>• essential survey data</li> <li>• geological conditions</li> <li>• hazards</li> <li>• potential hazards</li> <li>• coordination requirements/issues</li> </ul>
<p><b>Mine environmental, geological and survey data</b> may be in the form of:</p>	<ul style="list-style-type: none"> <li>• ventilation/gas data</li> <li>• deputy reports</li> <li>• geological hazard plan</li> <li>• survey data</li> <li>• longitudinal and cross sectional survey plans</li> </ul>
<p><b>Emergency situations</b> may include:</p>	<ul style="list-style-type: none"> <li>• roof and rib fall</li> <li>• fire</li> <li>• flash/ignition</li> <li>• loss of ventilation</li> <li>• injury to personnel</li> <li>• explosion</li> <li>• inrush</li> </ul>

<p><b>Hazards</b>/potential hazards may include:</p>	<ul style="list-style-type: none"> <li>• outburst</li> <li>• high pressure hoses</li> <li>• gas accumulation</li> <li>• friction ignition</li> <li>• roof</li> <li>• water</li> <li>• dust</li> <li>• windblast</li> <li>• weighting on the face</li> <li>• heat</li> </ul>
<p><b>Coordination</b> may include:</p>	<ul style="list-style-type: none"> <li>• support personnel and chocks</li> <li>• pantech</li> <li>• armoured face conveyors</li> <li>• breaker stage loader</li> <li>• panel belt</li> </ul>
<p><b>Operator (operational) maintenance</b> procedures are those established and authorised for the site.</p>	

## Unit Sector(s)

Coal Mining (Underground)

## Competency field

Refer to Unit Sector(s).

## Co-requisite units

Not applicable.