



Australian Government

RIIMCU401E Conduct special roadway operations

Release: 1

RIIMCU401E Conduct special roadway operations

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 conduct special roadway operations in coal mining. It includes forming and profiling roadways, headings and facelines.

It applies to those working in supervisory or technical specialist roles. They generally perform a broad range of operational activities in their area of responsibility and are responsible for monitoring a safe work environment.

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

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 conduct special roadway operations	1.1 Obtain, interpret, clarify and confirm work requirements 1.2 Access, interpret and apply special roadway operations documentation, and confirm work activity is compliant 1.3 Identify and address potential risks, hazards and environmental issues and implement control measures according to site requirements 1.4 Select and wear personal protective equipment according to site requirements 1.5 Access, interpret and apply mine environmental, geological and survey data according to job requirements 1.6 Obtain and interpret emergency procedures and identify steps

ELEMENT	PERFORMANCE CRITERIA
	required to respond to emergencies
2. Drive special roadways/faceline	2.1 Communicate and coordinate activities with others within scope of own role 2.2 Carry out prestart and start-up procedures according to manufacturer specifications and site requirements 2.3 Drive and operate equipment according to manufacturer specifications and job requirements 2.4 Form roadway/headings/face line according to manufacturer specifications, site and job requirements 2.5 Monitor changes to geological conditions and maintain ventilation according to site requirements 2.6 Monitor hazards and risks and confirm safe operations of plant and equipment 2.7 Park-up and shutdown and secure equipment according to manufacturer specifications and site requirements
3. Brush floor and roof	3.1 Observe survey marks and roof and rib support rules according to site and job requirements 3.2 Profile roadways/headings according to manufacturer specifications, site and job requirements
4. Carry out operator maintenance	4.1 Prepare machine/equipment for maintenance according to manufacturer specifications and site requirements 4.2 Conduct inspection and fault finding according to manufacturer specifications and site requirements 4.3 Carry out scheduled maintenance tasks according to manufacturer specifications and site requirements 4.4 Carry out housekeeping activities according to site requirements 4.5 Process maintenance records according to site requirements

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
Numeracy	Calculates resourcing requirements and performs mathematical calculations
Oral communication	Conveys information and requirements clearly and listens actively
Reading	Identifies and interprets relevant information from workplace

SKILL	DESCRIPTION
	procedures, documentation and legislation
Writing	Prepares specific information that complies with requirements, using sector-specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIIMCU401D Conduct special roadway operations.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for RIIMCU401E Conduct special roadway operations

Modification History

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- conduct special roadway operations on at least two occasions, including:
 - forming or profiling roadways or headings or facelines
 - confirming work requirements details, including:
 - nature and scope of task
 - achievement targets
 - locations
 - headings and required survey information
 - working and geological conditions
 - ventilation conditions
 - equipment and plant allocation, including any defects
 - hazards and potential hazards
 - coordination requirements and issues.

During the above, the candidate must:

- locate and apply relevant legislation, documentation, policies and procedures and confirm work activity is compliant
- implement requirements, procedures and techniques for conducting special roadway operations, including:
 - operating plant and equipment efficiently in special and difficult conditions
 - interpreting and applying survey data
 - interpreting and applying technical information and plans
 - predicting likely changes in roadway/faceline conditions and geology
- work effectively with others to plan, prepare and conduct special roadway operations in a manner that meets required outcomes, including:
 - organising work activities to meet task requirements

- communicating clearly and concisely with others to receive and clarify work instructions
- complying with reporting requirements and procedures
- determining coordination requirements throughout work activities.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- key legislation required to conduct special roadway operations
- key procedures and documentation required to conduct special roadway operations, including:
 - site operational procedures
 - support rules
- geological features of special conditions, including:
 - faults
 - dykes
 - intrusions
 - high stress zones
- techniques for confirming work requirements details, including:
 - nature and scope of task
 - achievement targets
 - locations
 - headings and required survey information
 - working and geological conditions
 - ventilation conditions
 - equipment and plant allocation, including any defects
 - hazards and potential hazards
 - coordination requirements and issues
- impacts of changing conditions on equipment, plant and mining operations
- techniques for conducting, supporting and ventilating special roadway operations, including forming and profiling:
 - roadways
 - headlines
 - facelines
- types, characteristics, technical capabilities and limitations of equipment required for special roadway operations, including:
 - continuous miners
 - shuttle cars
 - drills
 - explosives

- shearers
- road headers
- ramcars
- inspection and fault finding techniques for machines and equipment relating to coal mining roadway operations
- principles, processes and techniques for emergency response, evacuation and disaster planning
- techniques for communicating and coordinating work activities with others.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
 - personal protective equipment
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/Australian Quality Training Framework mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing the required level of RII training product knowledge
- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence outlined in this unit of competency, and

- the minimum years of current** work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

Industry sector	AQF indicator level***	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure	1	1 year
	2	2 years
Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure	3-6	3 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.	

*Guidance on simulated environments has been stipulated in the Companion Volume Implementation Guide located on VETNet.

**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 a minimum number of site assessments as determined by the relevant industry sector, across various locations.

*** While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

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