



Australian Government

Department of Education, Employment and Workplace Relations

RIIBLA202B Support underground shooting operations

Release: 1

RIIBLA202B Support underground shotfiring operations

Modification History

Not applicable.

Unit Descriptor

This unit covers supporting underground shotfiring operations in mining industry. It includes: planning for supporting shotfiring; providing support at the blast site; and clearing the site.

Application of the Unit

This unit is appropriate for those working in operational supporting roles, within:

- Coal mining
- Metalliferous 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 for supporting shotfiring	1.1. Access, interpret and apply compliance documentation relevant to supporting underground shotfiring operations 1.2. Obtain, interpret and clarify shotfiring requirements in the form of shift briefings, handover details or work orders 1.3. Access, interpret and apply environmental, geological and survey data required to complete the allocated work 1.4. Identify, manage and report all potential hazards 1.5. Resolve coordination requirements with others at the site prior to commencement of, and during, the work activity
2. Provide support at the blast site	2.1. Establish, secure and isolate shot site 2.2. Ensure holes are drilled to authorised pattern design, with specific reference to geology, hazards, and safety 2.3. Flush or clean and test drill holes 2.4. Apply explosion inhibitor 2.5. Identify and report any deteriorated explosives and accessories 2.6. Ensure explosives are transported in accordance with requirements and procedures 2.7. Load and stem the explosive 2.8. Recognise and respond to hazardous and emergency situations
3. Clear the site	3.1. Remove equipment and facilities not required from the shot site 3.2. Secure and muck-out the shot site following the initiation of the blast

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 in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to support underground shotfiring operations:

- apply legislative, organisation and site requirements and procedures
- apply personal and operational safety requirements
- access, interpret and apply technical and environmental information
- interpret geological and survey data
- apply procedures for drilling to patterns
- apply procedures for cleaning and testing holes
- apply explosives and detonators handling requirements and procedures
- identify potential hazards and manage risk
- apply record maintenance requirements
- use tools required to complete task
- apply environmental compliance requirements
- identify damaged/deteriorated explosives

Required knowledge

Specific knowledge is required to achieve the performance criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following as required to support underground shotfiring operations:

- site personnel and operational safety requirements
- legislative and site shotfiring requirements
- types and characteristics of explosives and protection measures associated with their use
- shotfiring techniques and procedures
- explosive handling, transportation and storage requirements
- shotfiring equipment characteristics, technical capabilities and limitations, site operational and maintenance procedures
- geological and survey data essential to shotfiring
- site environmental requirements and constraints related to shotfiring including blast monitoring systems
- physical and technical quality of explosives

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

	<p>language issues.</p> <ul style="list-style-type: none"> • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances. • 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	<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"> • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: <ul style="list-style-type: none"> • working with others to undertake and complete underground shotfiring operations
Guidance information for assessment	<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>Relevant compliance documentation may include:</p>	<ul style="list-style-type: none"> • legislative, organisation and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and Workplace Relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
<p>Shotfiring requirements may include:</p>	<ul style="list-style-type: none"> • the nature and scope of the blasting • essential survey information • site environmental conditions • essential geological information • detailed timings for the blast preparation • detailed responsibilities • coordination requirements/issues
<p>Geological and survey data may include:</p>	<ul style="list-style-type: none"> • wet or dry holes • strength of material to be shot • strength of surrounding strata • blast pattern plan • ventilation/gas data • deputies reports • details of cracking in holes
<p>Site establishment and security may include:</p>	<ul style="list-style-type: none"> • warnings • sentries • area clearance/isolation/barricading • inspection and testing for gas • other legislative requirements • safety distances and control/responsibilities
<p>Drilling equipment may include:</p>	<ul style="list-style-type: none"> • hand borer • air tracks • hand held drilling equipment (air, hydraulic) and machine mounted drilling equipment
<p>Explosive inhibitor may include:</p>	<ul style="list-style-type: none"> • stone

	<ul style="list-style-type: none">• dust• water
Types of explosives may include:	<ul style="list-style-type: none">• wet or dry• variable density• packaged free flowing• bulk• authorised explosives
Accessories may include:	<ul style="list-style-type: none">• detonators• shotfiring cable• stemming equipment• crack detector• flushing wand

Unit Sector(s)

Blasting

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.