



Australian Government

RIIBLA302E Conduct shotfiring operations in underground coal mines

Release: 1

RIIBLA302E Conduct shotfiring operations in underground coal mines

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 shotfiring operations in underground coal mines in coal mining. It includes supervising storage and transport of explosives and accessories, conducting blasts and carrying out post-blast activities.

It applies to those working in operational roles. They generally work under minimal supervision to undertake a broad range of skilled applications in varied work contexts, using some discretion and judgement in selecting equipment, services or contingency measures.

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 (underground)

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 underground shotfiring operations	1.1 Obtain, interpret, confirm and clarify blasting management plan and blast plan requirements and job requirements 1.2 Access, interpret and apply shotfiring documentation and confirm work activity is compliant 1.3 Identify, manage and report potential hazards, risks and environmental issues according to legislative and site requirements 1.4 Select and wear personal protective equipment according to site requirements 1.5 Obtain and interpret emergency procedures and confirm steps

ELEMENT	PERFORMANCE CRITERIA
	<p>required to respond to emergencies</p> <p>1.6 Coordinate vehicle, equipment and personnel support requirements within scope of own role</p> <p>1.7 Access, interpret and apply environmental, geological and survey data according to job requirements</p> <p>1.8 Carry out calculations required for pattern design, loading and tying in shots</p> <p>1.9 Complete pattern design according to job requirements</p> <p>1.10 Carry out briefings according to job and site requirements</p> <p>1.11 Identify and confirm explosives and accessories according to job requirements</p>
2. Supervise storage and transport of explosives and accessories	<p>2.1 Order and obtain explosives and accessories according to job requirements</p> <p>2.2 Confirm explosives and accessories are stored according to site requirements</p> <p>2.3 Confirm inventory control systems are maintained according to site requirements</p> <p>2.4 Confirm explosives and accessories are transported to blast area and segregate according to legislative requirements</p> <p>2.5 Confirm that explosives are not left unattended</p> <p>2.6 Identify and dispose of deteriorated or out-of-date explosives and accessories according to job and site requirements</p>
3. Prepare for charging	<p>3.1 Identify, manage and report potential hazards and risks according to legislative and site requirements</p> <p>3.2 Secure blast area according to blast plan and site requirements</p> <p>3.3 Establish and communicate access routes to shot area for authorised persons and vehicles</p> <p>3.4 Identify hole locations and non-conforming conditions</p> <p>3.5 Set up charging equipment according to job and site requirements</p> <p>3.6 Prepare holes for charging according to job and site requirements</p>
4. Charge holes	<p>4.1 Supervise blast personnel during loading operations within scope of own role</p> <p>4.2 Prime and charge holes according to loading plan</p> <p>4.3 Confirm blast holes are charged according to loading plan and identify non-conforming conditions</p> <p>4.4 Apply explosion inhibitor according to blast plan</p> <p>4.5 Confirm blast holes are stemmed according to blast plan</p> <p>4.6 Clear area and isolate/barricade blast area according to site requirements</p> <p>4.7 Test equipment and accessories according to manufacturer</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>specifications and site requirements</p> <p>4.8 Maintain records according to site requirements</p> <p>4.9 Conduct blast monitoring according to site requirements</p>
5. Conduct blast	<p>5.1 Carry out pre-blasting procedures and establish exclusion zone according to blast plan</p> <p>5.2 Tie in pattern and check according to blast plan</p> <p>5.3 Evaluate proposed firing time against potential factors impacting the blast</p> <p>5.4 Carry out firing clearance processes according to blast plan</p> <p>5.5 Initiate blast</p> <p>5.6 Check shot and complete records according to blast plan</p>
6. Complete post blast activities	<p>6.1 Carry out post blast inspection</p> <p>6.2 Secure firing circuits and initiation device according to manufacture specifications and site requirements</p> <p>6.3 Report blasting completion to relevant personnel</p> <p>6.4 Carry out post-blast coordination and declare area safe for re-entry according to site requirements</p> <p>6.5 Inspect site and address non-conformities according to site requirements</p> <p>6.6 Identify and dispose of surplus, damaged and deteriorated explosives and detonators according to manufacturer specifications and site requirements</p> <p>6.7 Confirm emergency services are advised of disposal activities according to site procedures</p> <p>6.8 Complete written reports</p>
7. Carry out equipment maintenance	<p>7.1 Carry out inspection and required maintenance according to manufacturer specifications and site requirements</p> <p>7.2 Complete maintenance records according to site requirements</p>

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	<ul style="list-style-type: none"> Calculates measurements, masses and dimensions
Reading	<ul style="list-style-type: none"> Identifies and interprets information from workplace documentation

SKILL	DESCRIPTION
Self-management	<ul style="list-style-type: none">• Monitors and minimises own exposure to worksite risks and hazards during activities

Unit Mapping Information

Supersedes and is equivalent to RIIBLA302D Conduct shotfiring operations in underground coal mines.

Links

Companion Volume Implementation Guide is found on VETNet -

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