



Australian Government

RIIBLA401D Manage blasting operations

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIIBLA401A Manage blasting operations.
2	Performance Evidence numbering corrected. Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to manage blasting operations in the Resources and Infrastructure Industries.

This unit is appropriate for those working in supervisory roles.

No licensing, legislation or certification requirements apply to this unit at the time of publication.

Elements and Performance Criteria

1. Manage compliance with legislation	1.1 Access, interpret and apply blasting operations documentation and ensure the work activity is compliant 1.2 Access, interpret and validate the blast design criteria 1.3 Identify and obtain relevant permits, licenses or authorities needed for blasting activities 1.4 Apply the legislative and site requirements and procedures for the purchase of explosives 1.5 Apply the procedures for the identification of potential hazards and the implementation and application of the site/organisation risk management system 1.6 Select and wear personal protective equipment appropriate to the work activities 1.7 Obtain and interpret emergency procedures and be prepared
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	for fire/accident/emergency 1.8 Apply the procedures to monitor the setting up and security of explosives storage location in compliance with legislative and site requirements 1.9 Manage legislative and site blasting reporting requirements and procedures 1.10 Report any loss or theft of explosives
2. Manage the storage, handling and transport of explosives	2.1 Apply the legislative and site requirements and procedures for safe handling of explosives 2.2 Apply the legislative and site requirements, procedures and safety precautions for the transport of explosives 2.3 Apply the legislative and site requirements, procedures and safety precautions for the storage of explosives 2.4 Apply the legislative and site requirements and procedures for setting-up and maintaining secure explosives storage locations
3. Manage the implementation of blasting activities	3.1 Identify environmental hazards and analyse the risks associated with blasting 3.2 Implement the blast plan 3.3 Apply the blast monitoring system in accordance with site procedures 3.4 Apply site and legislative procedures to ensure that site inspections to confirm the blast plan are implemented 3.5 Confirm and manage the availability of the type and quantity of explosives and associated materials required for blasting 3.6 Manage the site procedures and legislative requirements for the coordination of support requirements including vehicles, personnel and other equipment 3.7 Apply site procedures for setting up and securing the blast area 3.8 Apply the special requirements for secondary blasting operations 3.9 Apply and manage post-blasting coordination and inspection requirements 3.10 Complete all written statutory and site-required documents
4. Manage special conditions	4.1 Identify potential hazards resulting from physical, biological or chemical situations which include heat, cold, climatic and electro-static condition 4.2 Control and monitor special conditions that may occur

	4.3 Ensure that records and reports on special conditions are kept and maintained
5. Manage misfires	5.1 Apply site procedures for the re-assessment of the blast site for potential hazards and risks and ensuring work area is safe 5.2 Inspect blast area to identify misfires or potential misfires and identify cause of misfire 5.3 Secure the misfire area and communicate information to other personnel who may be affected 5.4 Apply procedures to for washing-out or re-charging, and manage refiring Communicate the area is now safe with other persons who may have been affected by blasting 5.5 Record and report misfires
6. Manage the disposal of explosives	6.1 Identify damaged or deteriorated explosives and accessories 6.2 Select an applicable disposal method for explosives and accessories 6.3 Plan for the disposal of the damaged, deteriorated or surplus explosives 6.4 Carry out the disposal of damaged, deteriorated and surplus explosives and detonators in accordance with legislative requirements and site procedures 6.5 Communicate disposal activities to site emergency services
7. Manage maintenance of blasting equipment	7.1 Identify the equipment necessary for use in preparing, initiating or monitoring blasting operations 7.2 Monitor maintenance and conduct routine inspection of blast and blast monitoring equipment in accordance with manufacturer's requirements and site procedures 7.3 Monitor the maintenance of blast monitoring instrumentation to ensure valid calibration as specified in manufacturers' requirements and according to site procedures 7.4 Ensure that maintenance and inspection records are kept according to site, manufacturer's or legislative requirements

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIIBLA401A Managing blasting operations

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for RIIBLA401D Manage blasting operations

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies relevant legislation, documentation, policies and procedures
- works effectively with others to plan, prepare and conduct blasting operations including:
 - complying with written and verbal reporting requirements and procedures
 - communicating clearly and concisely with others to receive and clarify work instructions
 - provision of clear and timely instruction and supervision by the individual of those involved in blasting operations
- demonstrates completion of managing blasting operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - validating the blast design criteria
 - obtaining relevant permits, licenses or authorities
 - applying the legislative and site requirements and procedures for:
 - the purchase of explosives
 - set-up and security of explosives
 - reporting
 - site access
 - handling, transport and storage of explosives

- site inspections
- type and quality of explosives used
- coordination of support vehicles, personnel and other equipment
- setting up and securing the blast area
- secondary blasting
- re-assessment of blast site
- misfires or potential misfires
- washing out or re-charging
- disposal of explosives
- identifying and analysing environmental risks
- implementing the blast plan
- monitoring blasts
- coordinating post-blast inspection
- monitoring maintenance and routine inspection of blast and blast monitoring equipment

Knowledge Evidence

The candidate must demonstrate knowledge in managing blasting operations:

- Australian standards and codes
- blast site procedures
- explosives and safety and health legislation
- emergency procedures
- environmental procedures
- equipment processes, technical capability and limitations
- basic geological and technical information
- blast plans
- manufacturers' instructions
- types and characteristics of blasting agents, explosives and initiation systems
- concepts such as density, velocity and relationships between variable
- assimilation, interpretation and application of information and technical data
- mathematical processes and applications
- cause and management of misfires
- identification of safety and environmental hazards
- explosives disposal methods

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit is best assessed in the context of this sector's 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 this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 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.	

*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 frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQF level

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