



Australian Government

RIIBLA402D Monitor and control the effects of blasting on the environment

Release: 2

RIIBLA402D Monitor and control the effects of blasting on the environment

Modification History

Release	Comment
1	This unit replaces RIIBLA402A Monitor and control the effects of blasting on the environment
2	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 monitor and control the effects of blasting on the environment in Civil construction, Coal and Metalliferous mining and Extractive.

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.

Unit Sector

Civil construction

Coal mining

Extractive

Metalliferous mining

Elements and Performance Criteria

1 Develop strategies to control the effects of blasting on the environment	1.1 Access, interpret and apply blasting documentation and ensure the work activity is compliant 1.2 Identify and evaluate the environmental hazards and controls to minimise the impact on the environment of ground vibration resulting from blasting 1.3 Identify and evaluate the environmental hazards and controls
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	to minimise the impact on the environment of flyrock resulting from blasting 1.4 Identify and evaluate the environmental hazards and controls to minimise the impact on the environment of air blast, noise and overpressure resulting from blasting 1.5 Identify and evaluate the environmental hazards and controls to minimise the impact on the environment of air pollution and dust resulting from blasting 1.6 Identify and evaluate the environmental hazards and controls to minimise the impact on the environment of water pollution resulting from blasting 1.7 Identify and analyse the objectives and criteria for safe and effective blast monitoring 1.8 Evaluate and select monitoring device options 1.9 Prepare procedures for the installation, establishment and operation of monitoring systems 1.10 Formulate the monitoring system maintenance program and procedures 1.11 Determine procedures for the audit, review and updating of the monitoring system 1.12 Select and wear personal protective equipment appropriate to the work activities 1.13 Obtain and interpret emergency procedures and be prepared for fire/accident/emergency
2 Implement environment monitoring systems	2.1 Implement procedures for monitoring, recording and reporting on environmental controls 2.2 Implement procedures for the installation and operation of monitoring systems and equipment 2.3 Implement procedures for the collection and analysis of environmental data 2.4 Process, record and report monitoring system data 2.5 Interpret measured data, compare with statutory and site requirements and implement identified actions
3 Review strategies	3.1 Audit the effectiveness of the environmental control system in order to ensure that blasting standards comply with statutory and environmental management plan requirements 3.2 Audit the effectiveness of the environmental control system in order to ensure that monitoring systems operate to statutory requirements

	3.3 Audit the effectiveness of the environmental control system in order to ensure that recording systems are maintained accurately and data are processed in accordance with environmental management plan requirements 3.4 Review the monitoring system to ensure that standards remain appropriate
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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

RIIBLA402A Monitoring and controlling the effects of blasting on the environment

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 RIIBLA402D Monitor and control the effects of blasting on the environment

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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 the monitoring and control of the effects of blasting 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 the monitoring and control of the effects of blasting
- demonstrates completion of monitoring and controlling the effects of blasting on the environment that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - planning and coordinating work
 - controlling the effects of blasting
 - assessing the risks and hazards attached to explosives in the environment
 - interpreting the impact of blast design on ground vibration, air blast and flyrock
 - auditing data and applying to blasting strategy

Knowledge Evidence

The candidate must demonstrate knowledge in monitoring and controlling the effects of blasting on the environment:

- legislative and statutory requirements and procedures
- sources of legislation
- differing geological features and conditions' effect on ground vibration, air blast and flyrock
- portable monitoring equipment characteristics, technical capabilities and limitations
- maintenance surveys and procedures

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	1	1 Year

Mining, Extractive (Quarrying) and Civil Construction	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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