



Australian Government

RIIBLA601E Design blasts

Release: 1

RIIBLA601E Design blasts

Modification History

Release	Comment
1	This unit replaces RIIBLA601D Design surface blasts. Amendments made to the title and element one to remove 'surface' allowing this unit to be used underground also. Unit application amended. Add mapping table.

Application

This unit describes a participant's skills and knowledge required to design blasts in Civil construction, Coal and Metalliferous mining and Extractive.

This unit is appropriate for those working in management roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between States, Territories and industry sectors. Relevant information must be sourced prior to the application of this unit.

Unit Sector

Civil construction

Coal mining

Extractive

Metalliferous mining

Elements and Performance Criteria

1. Plan and prepare for the design of blast	1.1 Access, interpret and apply blast plan documentation and ensure the work activity is compliant 1.2 Identify, address and report potential risks, hazards and environmental issues, determine acceptable levels of risk and implement control measures 1.3 Confirm the geological and survey data relevant to the design and implementation 1.4 Access, interpret and clarify the blast requirements relevant to the design and implementation 1.5 Identify operational limitations relevant to the design and implementation 1.6 Identify the available explosives and their characteristics
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	relevant to the design and implementation 1.7 Identify the available initiation options and their characteristics relevant to the design and implementation
2. Prepare the blast plan	2.1 Apply the blast design parameters to prepare a safe, effective and efficient blast plan 2.2 Ensure that the blast plan meets all of the blast requirements and parameters 2.3 Prepare and present the blast plan budget in accordance with the organisation's requirements 2.4 Document the blast plan
3. Implement, monitor and adjust blast plans	3.1 Issue, communicate, explain and clarify the blast plan to team members and others involved 3.2 Provide timely ongoing support and advice to those implementing the blast plan 3.3 Ensure written records and reports are maintained and issued to relevant personnel 3.4 Monitor and confirm the results of the blast against blast design requirements, parameters and the budget 3.5 Identify and resolve variances in consultation with relevant stakeholders and issue instructions for adjustments to future plans and/or their implementation

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

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIBLA601E Design blasts	RIIBLA601D Design surface blasts	Amendments made to the title and element one to remove 'surface' allowing this unit to be used underground also. Unit application amended. Add mapping table.	Equivalent unit

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 RIIBLA601E Design blasts

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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 undertake and complete designing blasts that meet all of the required outcomes including:
 - communicating clearly and concisely with others to receive and clarify work instructions
 - communicating clearly and concisely with others to resolve coordination requirements prior to commencing and during work activities
 - providing team leadership
- demonstrates completion of designing blasts that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - preparing the blast plan
 - preparing and presenting the blast plan budget
 - communicating, explaining and clarifying the blast plan to team members and others involved
 - monitoring and confirming the results of the blast against blast design requirements and parameters and the budget
 - identifying and resolving variances to the blast plan
 - documenting blast plan activity, variances and outcomes

Knowledge Evidence

The candidate must demonstrate knowledge of the following in designing blasts:

- site risk, statutory compliance, health, safety, environmental, quality and communication requirements and procedures
- geological data

- survey data
- range of blasting parameters
- operational techniques required for execution of the plan
- plant and equipment capabilities
- work planning techniques
- team leadership techniques
- consultative and coaching techniques
- work monitoring methods
- recording and reporting systems

Assessment Conditions

- Assessors must satisfy the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory competency requirements for assessors; 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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