



Australian Government

RIIBLA203E Conduct mobile mixing of explosives

Release: 1

RIIBLA203E Conduct mobile mixing of explosives

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 3.0.

Application

This unit describes the skills and knowledge required to load and mix explosives using mobile processing units at blast holes. It applies for both above ground and underground mobile processing units.

This unit applies to those working in site-based roles on mine sites and quarries in the coal mining, metalliferous mining, drilling, extractive, and civil infrastructure environments.

Licensing, legislation, regulatory and certification requirements that apply to this unit can vary between States, Territories and industry sectors, and must be sourced from state jurisdictions prior to applying the unit.

Unit Sector

Civil infrastructure

Coal mining

Drilling

Extractive

Metalliferous mining

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. Prepare to mix explosives using a mobile processing unit	1.1 Access, interpret and apply explosives documentation and ensure work activity is compliant 1.2 Locate, select and wear personal protective equipment appropriate for work activity 1.3 Inspect work area and establish, barricade, and signpost loading

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	area 1.4 Identify and address potential health, safety and environmental hazards and implement control measures in line with workplace procedures 1.5 Obtain and interpret emergency procedures in preparation for emergencies and incidents 1.6 Confirm safe and secure access to explosives precursors in line with workplace procedures and legislative requirements 1.7 Segregate incompatible goods prior to loading the mobile processing unit according to legislation and codes of practice 1.8 Inspect mobile processing unit for faults, and record faults in line with workplace procedures 1.9 Ensure attachments comply with standards and licensing requirements 1.10 Placard mobile processing unit and attachments to show the goods carried, hazardous chemicals identification, and emergency information in line with workplace procedures and legislative requirements 1.11 Check that safety equipment is fitted and ready for use in line with workplace procedures and legislative requirements
2. Load and mix explosives precursors	2.1 Carry out pre-start checks of vehicle or unit in line with workplace procedures 2.2 Identify faults and defects, and rectify or report them within scope of own responsibility and according to workplace procedures 2.3 Check availability of and calculate batch quantities for precursors to manufacture explosives 2.4 Inspect vehicle or unit and confirm that it is safe for loading explosives and free from unnecessary products and items 2.5 Position vehicle for loading and apply parking brake throughout precursor loading operation 2.6 Operate loading equipment to load specified amounts of precursors in line with workplace procedures 2.7 Load precursors in a safe manner to prevent spillage and injury to personnel, and use emergency procedures when required 2.8 Record details of loaded precursors

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
3. Transport explosives precursors to delivery point	3.1 Confirm and follow pre-planned transport route 3.2 Drive vehicle or unit according to road conditions, established mine traffic rules, and public traffic rules 3.3 Operate vehicle or unit in line with licences and regulations in the relevant jurisdiction, and workplace procedures 3.4 Identify and report potential emergency situations
4. Deliver explosives in blast hole	4.1 Assess ground conditions and confirm their suitability prior to commencing delivery of explosives 4.2 Select most appropriate hole discharge point and locate delivery point over blast hole 4.3 Confirm identity of blast hole and explosive loading requirements with relevant personnel 4.4 Regulate discharge of explosives to blast hole to achieve specified weight or stemming height 4.5 Complete loading hole and prepare vehicle or unit for next blast hole 4.6 Check area is clear and safe to move vehicle
5. Complete activity and store equipment	5.1 Complete delivery of required product 5.2 Flush delivery system according to workplace procedures 5.3 Safely exit blast site 5.4 Store vehicle or unit safely and securely in accordance with workplace procedures and legislative requirements 5.5 Complete and file documentation, and distribute according to workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skill	Description
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Reading	Identifies and interprets relevant information and ideas from workplace procedures, documentation, legislation, and regulations
Numeracy	Identifies and comprehends mathematical information required to load, mix, and deliver explosives precursors

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
RIIBLA203E Conduct mobile mixing of explosives (Release 1)	RIIBLA203D Conduct mobile mixing of explosives (Release 2)	Minor updates to all sections to reflect operator's role.	Equivalent

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 RIIBLA203E Conduct mobile mixing of explosives

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements and performance criteria of this unit.

The candidate must demonstrate completion of mobile mixing of explosives that safely, effectively and efficiently follows legislative requirements and workplace procedures to meet required outcomes on at least two occasions. This includes:

- preparing for blasting operations
- performing pre-start and shutdown checks
- handling, loading and transporting explosives precursors and explosives
- mixing explosives
- delivering explosives into blast hole
- performing cup weight density checks and confirming that measurements are to specification.

In the course of the above work, the candidate must also:

- locate and apply required documentation, policies and procedures
- drive and operate mobile processing units in line with site conditions
- identify common equipment faults
- calibrate vehicle or unit where applicable
- maintain security of explosives precursors
- operate emergency shutdown systems
- select and wear personal protective equipment required by work activities
- use a spill kit
- apply safe work practices.

Knowledge Evidence

The candidate must demonstrate the following knowledge to effectively complete the tasks outlined in the elements and performance criteria of this unit.

Key policies and procedures, state and territory legislation, codes of practice, and requirements when conducting the mobile mixing described in the performance evidence above, including those relating to:

- fires, accidents and emergencies
- personal protective equipment and safety equipment
- separation of incompatible goods prior to loading mobile processing unit (MPU)
- decontamination of units
- security of explosives precursors
- safety data sheets
- authorities to operate an MPU.

Key factors affecting work activities described in performance evidence above, including:

- differences between above and underground mobile mixing units
- types, properties, and hazards of explosives precursors and products manufactured
- purpose of density checks and outcomes of manufacturing out-of-specification explosives
- carrying capacity of MPUs being used in the performance evidence above
- mixing parameters and ratios of explosives precursors
- incompatible precursors and methods of segregation
- configuration, accessories and working parts of MPUs
- MPU loading equipment and methods.
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Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below.

The assessment must:

- include access to:
 - mobile mixing vehicle or unit
 - explosives precursors
 - personal protective equipment required for the activities described in the performance evidence
- be conducted in a safe environment
- be assessed in the context of this sector's work environment
- be assessed in compliance with relevant legislation and regulations; and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory competency standards as set out in the Standards for Registered Training Organisations (RTOs) current at the time of assessment. This includes:

- having knowledge of and/or experience using the latest techniques and processes
- possessing a high level of RII training product knowledge
- having understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- possessing formal industry and training qualifications to the level being assessed
- demonstrating the performance evidence and knowledge evidence 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.

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 must also demonstrate skills and knowledge from the minimum years of current work experience specified below, including time spent in roles related to the unit being assessed.

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	

Industry sector	AQF** level	Required assessor or industry subject matter expert experience
	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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