



Australian Government

AHCEXP304 Identify and select explosive products

Release: 1

AHCEXP304 Identify and select explosive products

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to identify and select explosive products and suitable mixtures that can be used for blasting for agricultural or land management purposes.

The unit applies to individuals who work under broad direction and take responsibility for their own work. This includes using discretion and judgement in the selection and use of available resources.

State or territory licensing, legislative or certification requirements apply in some jurisdictions. Users are advised to check with the relevant regulatory authority.

Pre-requisite Unit

Nil

Unit Sector

Explosives (EXP)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify explosives applications	1.1 Identify job application and planned blasting operations in consultation with field manager or supervisor 1.2 Identify site for blasting and check surrounding area to confirm safety considerations and actions 1.3 Consider site characteristics and identify risks and potential hazards for blast site

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Consider environmental implications of intended explosives usage 1.5 Consider available options for explosives for planned blasting operation 1.6 Follow workplace health and safety policies and procedures when handling or using explosives
2. Select explosives components	2.1 Select explosives to meet planned blasting outcomes, site conditions and identified hazards of blasting site 2.2 Ensure explosives and components are safe and not defective before use 2.3 Calculate the explosive energy required for site characteristics to achieve planned blasting outcomes 2.4 Prepare the quantity of explosive required to achieve the explosive energy 2.5 Select the appropriate explosive initiator device according to industry best practice 2.6 Select and use safety fuses to suit the application 2.7 Ensure use of explosives complies with relevant legislative requirements and Australian Standards

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Numeracy	Calculate and weigh out the amount of explosive required to achieve the required explosive blast energy

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCEXP304 Identify and select explosive products	AHCEXP302 Identify and select explosive products	Minor changes to Application and minor changes and addition of Performance Criteria for clarity Foundation Skills added Updated Performance Evidence, Knowledge Evidence and Assessment Conditions	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCEXP304 Identify and select explosive products

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that, on at least one occasion, the individual has:

- established with supervisor need to use explosives
- identified components of explosive products
- identified the risks and environmental implications of using explosives, including the effect on:
 - structures
 - personnel
 - livestock and fauna
 - environment
- selected explosives and initiator devices consistent with:
 - blasting operation
 - blast site conditions
 - identified hazards
- used safety fuses appropriate for the explosive charge
- applied workplace health and safety policies and procedures when working with explosives
- applied policies and procedures, legislative requirements and Australian Standards.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- explosive products, their use and function
- risk assessment and workplace health and safety procedures
- performance of explosive products, including:
 - calculating explosive energy

- determining amount of explosive charge required for a given situation
- powder factor
- behaviour of the substrate material when subjected to blasting:
 - sand
 - rock
 - clay
- applications of explosives in the context of own conservation and land management work:
 - stump and tree removal
 - dams
 - soil de-compaction
 - rock removal
 - trenching
- properties of explosives/blasting agents and their suitability for different applications:
 - detonating
 - initiation
 - primary
 - secondary
- features that identify defective or damaged explosives:
 - age
 - physical condition
 - degradation
- key concepts of the Australian Standards relating to:
 - storage
 - transportation
 - use of explosives
- state and territory legislation for the use of explosives.

Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in an environment that accurately represents workplace conditions and that exposes individuals to live detonation conditions
 - safe transport and storage facilities suitable for explosives
- resources, equipment and materials:
 - explosives, detonators and fuses
 - safety equipment
- specifications:
 - policies, procedures, processes for the safe use of explosives

- safety data sheets for explosives
- instructions/job specifications for a blasting operation
- legislation and Australian Standards for the use of explosives.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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