Australian Government

# DEFEO720A Conduct post blast analysis

**Release: 2**

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

# DEFEO720A Conduct post blast analysis

## Modification History

| Release | TP version | Comments |
|---|---|---|
| 2 | DEF12 V2 | Layout adjusted. |
| 1 | DEF12 V1 | First release. |

## Unit Descriptor

This unit covers the competency required to analyse a blast site following an ***incident*** involving ***explosive ordnance***.

## Application of the Unit

This competency applies to the individual who is required to conduct an analysis of a site following an explosive ordnance incident. The incident may include accidents or intentional blasts using explosive ordnance or improvised explosive devices.
The unit requires the individual to examine the site to identify the nature of the blast and provide advice to authorities on the incident.

## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.

## Employability Skills Information

This unit contains employability skills.

# Elements and Performance Criteria Pre-Content

| | |
|---|---|
| Elements describe the essential outcomes of a Unit of Competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |

# Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. **Prepare for post blast analysis** | 1.1 ***Pre-scene arrival planning*** is conducted in accordance with instructions and procedures |
| | 1.2 ***Safety requirements*** are identified and applied in accordance with legislation and organisational requirements |
| | 1.3 ***Security requirements*** are identified and applied in accordance with legislation and organisational requirements |
| | 1.4 ***Equipment, tools and stores*** required for post blast analysis are identified and prepared for use in accordance with authorised procedures |
| 2. **Examine blast site** | 2.1 ***Contact and liaison with other agencies*** is established on arrival and maintained in accordance with current procedures |
| | 2.2 Blast site examination is conducted in accordance with current policy and procedures addressing all ***relevant work health and safety requirements*** |
| | 2.3 ***Data recording*** is documented in accordance with standard procedures and within resource limitations |
| 3. **Analyse the data and determine incident cause** | 3.1 Incident data is reviewed in accordance with standard procedures |
| | 3.2 Incident data is analysed and conclusions are drawn from the analysis in accordance with standard procedures |
| | 3.3 ***Specialist advice*** is sought in accordance with analysis requirements and standard procedures |
| | 3.4 Conclusions are drawn from the analysis in determining the cause of the incident |
| 4. **Maintain documentation** | 4.1 Analysis process is documented in accordance with standard procedures |
| | 4.2 ***Information related to the cause of the incident*** is provided to authorities in accordance with standard procedures |
| | 4.3 Evidence is provided to inquiries/courts as required |

# Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

### Required Skills

- analyse and evaluate information
- apply knowledge of explosive ordnance
- apply safety procedures
- apply security procedures
- apply time management
- apply operational safety
- communicate orally and in writing
- conduct appropriate tests
- conduct liaison
- interpret test methods/procedures
- maintain security, integrity, traceability of samples, sub-samples, test data and results, and documentation
- operate specialist explosive ordnance disposal vehicle
- operate test equipment
- read, access, interpret and apply technical instructions

### Required Knowledge

- analysis process
- characteristics, technical capabilities, effects and limitations of explosive ordnance
- chemical principles and concepts underpinning explosive ordnance
- documentation requirements
- initiation procedures
- organisation and/or legal traceability requirements
- relevant testing procedures
- security procedures
- theory of explosive ordnance design
- use of instruments for qualitative and/or quantitative analysis

# Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

**Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessment must confirm the ability to:

- conduct post blast analysis
- determine the cause of the incident
- provide technical advice to authorities
- maintain relevant records

**Consistency in performance**

Competency should be demonstrated over time in a variety of incidents or in simulated environments.

**Context of and specific resources for assessment**

**Context of assessment**

Competency should be assessed in an actual or simulated activity.

**Specific resources for assessment**

Access is required to:

- explosive ordnance
- blast sites

**Method of assessment**

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an industry-approved simulated work environment. Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors
- written or oral questions

# Range Statement

| The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below. | |
|---|---|
| ***Incidents*** may include: | • Accidental or intentional explosion involving explosive ordnance or an improvised explosive device |
| ***Explosive ordnance*** includes: | • All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents such as bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro explosive devices; clandestine and other improvised explosive devices; and all similar or related items or components explosive in nature |
| ***Pre-scene arrival planning*** may include: | • Acquiring as much information on the incident and current situation as is available |
| ***Safety requirements*** may include: | • Blast debris<br>• Damaged structures<br>• Unexploded ordnance |
| ***Security requirements*** may include: | • Check points<br>• Cleared areas<br>• Lighting<br>• Screening<br>• Sentries |
| ***Equipment, tools and stores*** may include: | • Chemical detection/analysis equipment<br>• Digging tools<br>• Hook and line<br>• Personal protective equipment<br>• Specialist explosive ordnance disposal vehicle<br>• Telescope<br>• X-ray including complete equipment schedules and processing equipment<br>• And may include reference materials such as:<br>  • STANAGS<br>  • Defence service instructions<br>  • memorandums of understanding<br>  • standing operating procedures<br>  • range instructions |

| | |
|---|---|
| ***Contact and liaison with other agencies*** may cover: | • Authorisation<br>• Chain of evidence<br>• Control arrangements<br>• Evacuation requirements<br>• Media details and releases<br>• Safety aspects |
| ***Relevant work health and safety requirements*** may: | • Be subordinate to the operational requirement in the performance of explosive ordnance disposal operations<br>• Involve applying recognised safety precautions |
| ***Data recording*** may include: | • Audio recording<br>• Chemical analysis<br>• Collection of evidence<br>• Computer generated data<br>• Digital imaging<br>• Global positioning system (GPS)<br>• Hand written notes<br>• Measurements<br>• Photographic<br>• Sketches<br>• Video recording |
| ***Specialist advice*** may include: | • Engineering<br>• Law enforcement<br>• Medical<br>• Scientific |
| ***Information related to the cause of the incident*** may include: | • Initiation method/s<br>• Quantity of explosive/s<br>• Type/s of explosive |

# Unit Sector(s)

Not applicable.