



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **PUADEFEO806A Conduct environmental tests**

**Revision Number: 1**

## **PUADEFEO806A Conduct environmental tests**

### **Modification History**

Not applicable.

### **Unit Descriptor**

#### **Unit Descriptor**

This unit covers the competency required to conduct environmental tests of explosive ordnance and other equipment.

Environmental tests are conducted to ensure weapon systems and explosive ordnance in service with the Australian Defence Force meet the required environmental standards. The tests are also conducted on other Defence and non Defence equipment. The environmental tests can be conducted as a component of the assessment of safety and suitability for service (S<sup>3</sup> process) or as an in-service survey.

This unit does not cover the planning of environmental tests, which is covered in PUADEFEO602C Plan explosive ordnance trials.

### **Application of the Unit**

#### **Application of the Unit**

This unit was developed for environmental testing specialists working within proof and experimental organisations in Defence but is applicable to any individual in this field of work.

Typically these individuals must demonstrate the ability to work as individuals and as part of a team under direct and/or indirect supervision, use discretion and judgement, and take responsibility for the quality of their output. All activities are carried out in accordance with relevant organisational policies and procedures.

## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.

## Employability Skills Information

**Employability Skills** This unit contains employability skills.

**Pre-requisite Unit/s** Nil

## 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 Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

### ELEMENT

### PERFORMANCE CRITERIA

#### 1. Prepare for environmental tests

- 1.1 *Stakeholders* and test participants are briefed in accordance with *organisational policies and procedures*, and *test plan*
- 1.2 Safety systems and procedures are checked and initiated in accordance with organisational policies and procedures, and test plan
- 1.3 Information on resource requirements and availability is obtained and confirmed in accordance with procedures
- 1.4 *Information support systems* for *environmental tests*, including achievable reporting and recording processes, are prepared in accordance with resource requirements
- 1.5 Coordination issues with others affected by the tests are negotiated and resolved
- 1.6 Safety traces are constructed when required, in accordance with standard procedures
- 1.7 Occupational health and safety (OH&S) principles and requirements are identified and observed throughout the test process

#### 2. Conduct tests

- 2.1 Environmental test planners are identified and liaison is effected in accordance with policies and procedures
- 2.2 Test plan is implemented, monitored and amended based on changing circumstances in accordance with *methodologies and procedures*
- 2.3 *Tests* are conducted in accordance with testing requirements
- 2.4 *Resources* are allocated to testing tasks in accordance with test plan and resource availability
- 2.5 Data being generated by tests is recorded in accordance with the agreed methodology

**ELEMENT****PERFORMANCE CRITERIA****3. Report on test results**

- 3.1 Data generated by the test is collected and reported in accordance with policies and procedures
- 3.2 Options and recommendations resulting from the test are provided in a *clear and comprehensive format*
- 3.3 Post testing reports, statistical reports and other records are produced and maintained in accordance with requirements

## **Required Skills and Knowledge**

### **REQUIRED SKILLS AND KNOWLEDGE**

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

#### **Required Skills**

- allocate resources
- apply organisational safety policies and structures
- apply organisational OH&S requirements
- assess risks
- communicate effectively with stakeholders
- coordinate activities
- evaluate information
- liaise effectively with stakeholders
- write reports

#### **Required Knowledge**

- environmental testing methodologies
- evaluation processes
- organisational OH&S requirements
- organisational safety policies and structures
- reporting procedures
- resource allocation procedures
- resource requirements
- risk assessment

# Evidence Guide

## 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 apply environmental test methodologies and procedures including the coordination of test resources and the documentation of test results.

Assessment must also confirm the ability to conduct environmental tests against required standards.

### **Consistency in performance**

Competency should be demonstrated in a range of actual or simulated environmental test contexts.

### **Context of and specific resources for assessment**

#### **Context of assessment**

Competency should be assessed in the workplace or in a simulated work environment, in accordance with all relevant legislation and organisational requirements.

#### **Specific resources for assessment**

Access is required to

- facilities and resources used in conducting environmental tests.

## EVIDENCE GUIDE

### Method of assessment

This unit may be assessed with the following unit:

- PUADEFEO101D Work safely with explosive ordnance.

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

### 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.

#### Stakeholders may include

Clients or customers (internal and external)  
 End user/s  
 General public  
 Industry  
 Landowner/s  
 Organisation's senior management  
 Other agencies  
 Other functional areas within the organisation  
 Project teams  
 Relevant interest groups  
 Sponsor/funding bodies  
 Steering committee members  
 Supplier/service provider  
 Unions

#### Organisations may include

Defence  
 Defence contractors and sub-contractors  
 Defence Materiel Organisation  
 Defence Science and Technology Organisation  
 International test agencies

#### Policies and procedures may include

Government and organisational policy, guidelines and procedures relating to:

- delegation approvals
- industrial agreements
- procurement guidelines
- resourcing
- risk management
- security
- strategic or operational plans
- technical and regulatory framework
- testing and evaluation

**RANGE STATEMENT****Test plans may include**

- training
- Relevant commonwealth, state/territory and local laws affecting organisation's administration such as:
- financial management and accounting legislation and regulations
  - OH&S legislation
  - public sector management acts
- Acquisition strategies
- Budget and financial management strategy
- Contract management
- Cost estimates
- Evaluation criteria
- Expected/measurable outcomes
- Facilities
- Functional performance specifications
- Governance strategy
- Implementation strategy
- Inclusions and exclusions
- Information/communication strategy
- Intellectual property strategies
- Milestones
- Objectives
- Occupational concept document
- People plan including human resource management and human resource development
- Performance criteria/indicators
- Purpose
- Quality assurance
- Quality control
- Quality standards
- Rationale
- Required resources
- Resource management

**RANGE STATEMENT**

	Risk management
	Roles and responsibilities
	Safety criteria
	Schedule/timeline
	Specific equipment, instrumentation, and/or specialised facilities and required conditions
	Task/WBS
	Test and evaluation master plan (TEMP) criteria
	Test concept document
	Testing control mechanisms
	Testing deliverables and their acceptance criteria
<b>Information support systems may include</b>	Computerised systems
	Manual systems
<b>Environmental tests may include</b>	Dust and dirt
	Extremes of heat and cold
	Humidity and rain
	Vibration and shock
<b>Methodologies and procedures may include</b>	Those established by:
	<ul style="list-style-type: none"> <li>• divisions</li> <li>• manufacturer</li> <li>• organisation</li> </ul>
	Or may be specified by the client
<b>Tests may include</b>	Design and manufacture of specific test apparatus
	Use of environmental chambers
<b>Resources may include</b>	Budgets
	Materials
	Personnel
	Time
<b>Clear and comprehensive format may include</b>	Development of new procedures for future activities
	Outcomes that can be easily understood
	Solutions to problems that were faced during the testing

## **RANGE STATEMENT**

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## **Unit Sector(s)**

Not applicable.