



**Australian Government**

# **DEFPE001A Conduct field refuelling operations from a bulk fuel installation**

**Release: 2**

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## Modification History

Release	TP Version	Comments
2	DEF12V2	Layout adjusted. No changes to content.
1	DEF12V1	Primary release.

## Unit Descriptor

This unit covers the competency required to conduct refuelling of vehicles and plant from a bulk fuel installation in a field environment to transfer fuel products between storage mediums within the installation.

## Application of the Unit

This competency applies to personnel working as individuals or in small teams under direct supervision, with limited decision making.

Refuelling operations involve the use of a range of refuelling equipment from 50 mm to 100 mm and may incorporate single or multiple fuel products within a single installation.

## 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. <b>Prepare for refuelling operations</b>	1.1 Refuelling tasks are received and confirmed with supervisor 1.2 <b>Refuelling equipment</b> is inspected and prepared for operation in accordance with <b>workplace procedures</b> 1.3 <b>Personal protective equipment</b> is selected and worn during refuelling operations 1.4 <b>Fuel is tested</b> for product contamination. 1.5 Contaminated product is quarantined and reported to supervisor 1.6 Work health and safety (WHS) requirements and recognised safety precautions are applied throughout the operation in accordance with standard procedures 1.7 Environmentally sustainable work practices are identified, assessed and implemented where feasible
2. <b>Perform field refuelling and fuel transfer operations</b>	2.1 Vehicles and plant are earthed to prevent discharge of static electricity prior to commencement of refuelling 2.2 Refuelling equipment is operated in accordance with manufacturers' instructions 2.3 Refuelling operations are conducted in accordance with workplace procedures 2.4 Fuel transfer process is monitored and faults are rectified or reported in accordance with workplace procedures 2.5 <b>Emergencies/incidents</b> are responded to in accordance with <b>emergency response plans</b> 2.6 Fuel transfer process is shut down in accordance with workplace procedures 2.7 Documentation is completed in accordance with workplace procedures
3. <b>Cease refuelling operations</b>	3.1 Bulk fuel installation is <b>decommissioned</b> in accordance with workplace procedures 3.2 Fuel transfer equipment is recovered in accordance with workplace procedures 3.3 Fuel transfer equipment is inspected and maintained in accordance with manufacturers' instructions 3.4 Maintenance documentation is completed in accordance with workplace procedures 3.5 Installation site is refurbished in accordance with

**ELEMENT****PERFORMANCE CRITERIA**

organisational environmental policies and procedures

**Required Skills and Knowledge**

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

**Required Skills**

- control fuel spills
- interpret fuel markings and panels
- interpret technical diagrams and publications
- select and use appropriate petroleum equipment
- select and use personal protective equipment
- use firefighting equipment such as fire extinguishers, knapsack sprayers, main line firefighting equipment

**Required Knowledge**

- dangerous goods handling procedures
- emergency procedures when transferring and handling fuel products
- environmental protection measures to be applied during fuel transfer operations
- firefighting techniques
- first aid
- fuel products and fuel transfer systems including:
  - valve and hose systems
  - basic hydraulics principles
  - physical properties of fuels
  - causes of explosions and related preventative measures
  - functions and responsibilities of team members
  - hazard control methods associated with fuel products
  - hazards and safety precautions to be observed during fuel transfer operations
  - maintenance procedures for fuel transfer systems
  - relevant WHS and pollution control legislation and policies

## Evidence Guide

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

Assessment must confirm the ability to refuel vehicles and refuel plant.

### **Consistency in performance**

Competency should be demonstrated over time to ensure the candidate is assessed across a wide variety of situations within the workplace.

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

#### **Context of assessment**

Competency should be assessed in the workplace or a simulated environment.

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

Access is required to:

- workplace refuelling equipment and fuel products
- safety equipment and personal protective equipment
- specific workplace operating procedures and publications

## 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.

<p><b><i>Refuelling equipment</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• 50 mm/100 mm fuel equipment including:             <ul style="list-style-type: none"> <li>• fittings</li> <li>• pipelines and hoses</li> <li>• pumps</li> <li>• valves, vessels and tanks</li> </ul> </li> <li>• Measurement instruments including:             <ul style="list-style-type: none"> <li>• hydrometers</li> <li>• tapes</li> <li>• thermometers</li> </ul> </li> </ul>
<p><b><i>Workplace procedures</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• Australian Standards</li> <li>• Briefs</li> <li>• Duty statements</li> <li>• Legislative requirements</li> <li>• Manufacturers' handbooks, industry specifications and technical instructions</li> <li>• WHS regulations</li> <li>• Organisational policies and procedures</li> <li>• Procedure manuals</li> <li>• Relevant state/territory or federal legislation</li> <li>• Standard Operating Procedures</li> <li>• Technical procedures</li> <li>• Written or verbal instructions</li> </ul>
<p><b><i>Personal protective equipment</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• Eye protection</li> <li>• Gloves</li> <li>• Hearing protection</li> <li>• High visibility clothing</li> <li>• Mask or respirator</li> <li>• Safety headwear and footwear</li> </ul>
<p><b><i>Testing fuel for product contamination</i></b> must include:</p>	<ul style="list-style-type: none"> <li>• Appearance</li> <li>• Particulate</li> <li>• Water</li> </ul>
<p><b><i>Emergencies/incidents</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• Explosions</li> <li>• Fires</li> <li>• Fuel spills</li> <li>• Inhalation and/or skin contact with vapours and gases</li> </ul>

<i>Emergency response plans</i> may include:	<ul style="list-style-type: none"><li>• Fire plan</li><li>• First aid plan</li><li>• Spill/environmental plan</li></ul>
<i>Decommissioning</i> may include:	<ul style="list-style-type: none"><li>• Deconstructing the system</li><li>• Pigging the pipelines</li></ul>

## Unit Sector(s)

Not applicable.