



Australian Government

Department of Education, Employment and Workplace Relations

PUADEFPE004A Assist in the construction and maintenance of a nonpermanent bulk fuel installation

Release: 1

PUADEFPE004A Assist in the construction and maintenance of a non-permanent bulk fuel installation

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit covers the competency required to assist in the construction and maintenance of multi product non-permanent bulk fuel installations, often situated in a remote locality.

Application of the Unit

Application of the Unit

This unit applies to personnel working in teams under supervision. The complexity of construction is in direct relation to the size of the installation and the number of different fuel products to be stored.

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 construction

- 1.1 Installation instructions, including *schematic diagrams*, are received and confirmed with supervisor
- 1.2 *Equipment* is selected and inspected for serviceability prior to construction
- 1.3 *Safety equipment* is set-up prior to commencement of construction
- 1.4 Occupational health and safety (OH&S) requirements and recognised safety precautions are applied throughout the operation in accordance with standard procedures
- 1.5 Environmentally sustainable work practices are identified, assessed and implemented where feasible

2. Construct field bulk fuel installations

- 2.1 Storage tanks are positioned in accordance with schematic diagrams and orders
- 2.2 *Manifold system* is constructed in accordance with *workplace procedures* and schematic diagram
- 2.3 *Problems encountered during construction process* are rectified within scope of own authority or reported to supervisor
- 2.4 Installation is *pressure tested* and *commissioned* in accordance with supervisor's instructions and workplace procedures
- 2.5 Site is refurbished in accordance with workplace procedures

ELEMENT

PERFORMANCE CRITERIA

3. **Maintain field bulk fuel installations**

- 3.1 Equipment is maintained in accordance with manufacturers' instructions and workplace procedures
- 3.2 *Housekeeping duties* are performed in accordance with workplace procedures
- 3.3 Bulk fuel storage tanks are measured and levels are recorded in accordance with workplace procedures
- 3.4 Emergencies are responded to in accordance with workplace procedures
- 3.5 *Fuel istested* for product contamination and results are recorded
- 3.6 Contaminated product is quarantined and reported to supervisor

Required Skills and Knowledge

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

Required Knowledge

- dangerous goods handling procedures
- first aid
- fuel transfer equipment operation
- functions and responsibilities of team members
- hazard control methods associated with fuel products
- maintenance procedures for fuel transfer systems
- relevant OH&S and pollution control legislation and policies

Evidence Guide

EVIDENCE GUIDE

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

Assessment must confirm the ability to:

- assist in constructing and maintaining different types of non-permanent bulk fuel installations of different sizes and with different fuel products to be stored
- work as part of a team
- work remotely.

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 a field environment.

Specific resources for assessment

Access is required to:

- workplace equipment required for the construction of non-permanent bulk fuel installations
- safety equipment and personal protective equipment
- specific workplace operating procedures and publications.

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.

Schematic diagrams may include

Bunding
Pipelines
Pumps
Safety equipment
Storage tanks

Equipment may include

50 mm/100 mm fuel equipment including:

- fittings
- fuel metering equipment
- pipelines and hoses
- pumps
- valves, vessels and tanks

Measurement instruments including:

- hydrometers
- thermometers
- tapes
- Emergency shower/eye wash
- Fire extinguishers
- First aid kits
- Spill kits

Safety equipment may include

Manifold system may include

- Bonding
- Earthing
- Filters
- Fittings
- Pipes
- Pumps
- Valves

Workplace procedures may include

Australian Standards
Briefs
Duty statements
Fire orders
Legislative requirements
Manufacturers' handbooks, industry specifications and technical instructions
OH&S regulations
Organisational policies and procedures

RANGE STATEMENT

	Pollution control plan Procedure manuals Relevant state/territory or federal legislation Standard Operating Procedures Technical procedures Written or verbal instructions
Problems encountered during construction process may include	<ul style="list-style-type: none">• Damaged storage tanks and pipelines• Incorrect site selection/preparation• Insufficient equipment
Pressure testing of installation may include	<ul style="list-style-type: none">• Correct earthing and bonding• Ensuring a closed system• Ensuring installation conforms to schematic diagram• Security of all components, fittings and fasteners• Testing installation for leaks
Commissioning of installation may include	<ul style="list-style-type: none">• Receipting fuel• Testing fuel• Testing installation for serviceability
Housekeeping duties may include	<ul style="list-style-type: none">• Inspecting bulk fuel installation for leaks• Inspecting integrity of earthing and bonding
Testing fuel for product contamination must include testing	<ul style="list-style-type: none">• Appearance• Particulate• Water

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Co-requisite Unit/s Nil