



Australian Government

Department of Education, Employment and Workplace Relations

DEFPE006A Assist in the operation of the tank fabric collapsible marine system

Release: 1

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Modification History

Not applicable.

Unit Descriptor

Unit Descriptor

This unit covers the competency required to assist in the operation of the *tank fabric collapsible marine system (TFCM)* to transfer fuel from ships anchored offshore to shore-based storage facilities.

The TFCM is a flexible fuel storage tank that is installed onto a suitable *marine vessel*.

Application of the Unit

Application of the Unit

The TFCM is utilised in marine environments where no other facilities exist to transfer fuel from ocean tankers to shore-based field fuel installations.

This unit is associated with DEFPE007A Assist in the operation of the towed flexible barge system, which covers the transfer of smaller amounts of fuel by boat rather than large quantities by barge and floating pipeline. This unit applies to personnel working in teams under supervision.

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 operations

- 1.1 Task requirements are received and confirmed with supervisor
- 1.2 *Components* are unpacked and inspected for serviceability in accordance with *workplace procedures*
- 1.3 Components are assembled in accordance with workplace procedures
- 1.4 Difficulties encountered during assembly are dealt with or reported in accordance with workplace procedures
- 1.5 Appropriate *personal protective equipment* is selected and worn during transfer operations
- 1.6 Occupational health and safety (OH&S) 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
- 1.8 Appropriate documentation is completed throughout the operation in accordance with workplace procedures
- 1.9 Operational orders, administrative and emergency procedures are received from supervisor and are acknowledged prior to commencement of operation

ELEMENT**PERFORMANCE CRITERIA****2. Receive fuel from ship**

- 2.1 Flexible fabric tank is installed onto vessel from the shore or directly off a ship in accordance with supervisor's instructions, workplace procedures and manufacturers' instructions
- 2.2 TFCM is connected to ship's pipeline in preparation for transfer operations
- 2.3 **Pre-operation checks** are conducted in accordance with manufacturers' instructions and workplace procedures
- 2.4 **Fuel is tested** for product contamination and results are recorded
- 2.5 Contaminated product is quarantined and reported to supervisor
- 2.6 Fuel is transferred in accordance with workplace procedures
- 2.7 **Emergencies/incidents** are responded to in accordance with **emergency response plans**
- 2.8 TFCM is disconnected from refuelling ship in accordance with workplace procedures

3. Issue fuel from TFCM to shore

- 3.1 Condition of the TFCM is continually monitored during sea transit in accordance with workplace procedures and any issues are reported promptly to supervisor or rectified if fault is within scope of own authority
- 3.2 Fuel is discharged in accordance with workplace procedures after the vessel has been moored
- 3.3 Equipment is monitored during transfer operations and faults are rectified or reported in accordance with workplace procedures
- 3.4 Gauges are monitored to ensure transfer is in accordance with Standard Operating Procedures
- 3.5 **Communication** is maintained with team members and supervisor during transfer operations
- 3.6 Emergencies/incidents are responded to in accordance with emergency response plans
- 3.7 Fabric flexible tank is extracted from the vessel
- 3.8 Equipment is recovered in accordance with workplace procedures

ELEMENT**PERFORMANCE CRITERIA****4. Perform cleaning and maintenance procedures**

- 4.1 Appropriate personal protective equipment is selected and worn during cleaning operations
- 4.2 Equipment is cleaned following use in accordance with manufacturers' instructions
- 4.3 Cleaning chemicals are handled and used in accordance with manufacturers' instructions
- 4.4 Workplace environmental procedures are followed when performing cleaning operations
- 4.5 Equipment is inspected for damage and wear in accordance with workplace procedures
- 4.6 Maintenance and *minor repairs* within scope of own responsibilities are conducted in accordance with manufacturers' instructions and workplace procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required Skills

- communicate effectively in the workplace
- control fuel spills
- interpret fuel markings and panels
- interpret technical diagrams and publications
- operate fuel pumping and discharge systems
- use personal protective and safety equipment

Required Knowledge

- cleaning procedures and use of cleaning agents
- dangerous goods handling procedures
- first aid
- functions and responsibilities of team members
- hazard control methods associated with fuel products
- maintenance procedures for fuel storage mediums
- 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

Nil

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 marine environment or a simulated environment.

Specific resources for assessment

Access is required to:

- TFCM
- bulk fuel tankers or simulated platform
- suitable fuel products
- 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.

Tank fabric collapsible marine system may consist of	Rubber tank carcass with a protection valise Tie down ratchets Webbing harness
Marine vessel may consist of	Civilian fuel carriers LCM8s RAN Frigates
Components may include	Firefighting equipment Fuel handling equipment Manifold Pollution prevention equipment Protection equipment TFCM fill hose Tools and immediate field repair equipment
Workplace procedures may include	Australian Standards Briefs Duty statements Fire orders Legislative requirements Manufacturers' handbooks, industry specifications and technical instructions Organisational policies and procedures Pollution control plan Procedure manuals Relevant state/territory and organisational OH&S regulations Relevant state/territory or federal legislation Standard Operating Procedures Technical manuals Written or verbal instructions
Personal protective equipment may include	Eye protection Gloves Hearing protection Personal floatation devices Safety headwear and footwear
Pre-operation checks may include	Inspection of all components Positioning of other team members

RANGE STATEMENT

	Security of fittings, hoses, rafts
Testing fuel for product contamination must include testing	Appearance Particulate Water
Emergencies/incidents may include	Contact of hazardous substances with skin and eyes Fire Spills, leaks and ruptures
Emergency response plans may include	Fire plan First aid plan Pollution control plan
Communication methods may include	Hand signals Radio communications
Minor repairs may include	Pump repairs Repairing minor leaks Replacing hoses

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Co-requisite Unit/s Nil