



Australian Government

DEFPET007 Assist in the operation of the towed flexible barge system

Release: 1

DEFPET007 Assist in the operation of the towed flexible barge system

Modification History

Release 1. This is the first release of this unit of competency in the DEF Defence Training Package.

Application

This unit specifies the skills and knowledge required to assist in the operation of the towed flexible barge (TFB) system to transfer fuel from ships anchored offshore to shore-based storage facilities.

It includes preparing to receive fuel from maritime operations and issuing fuel from a TFB system to shorebased operations.

A TFB system is utilised in marine environments where no other facilities exist to transfer large quantities of fuel from ocean tankers to shorebased field fuel installations.

This unit applies to persons working as petroleum operators in Defence but is applicable to any individual in this field of work.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Persons undertaking this unit work independently and as part of a team under supervision and perform routine tasks in a range of contexts.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable

Competency Field

Petroleum Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Prepare for operations

- 1.1** Obtain and confirm task with relevant personnel
- 1.2** Unpack and inspect components for serviceability
- 1.3** Assemble TFB system components in accordance with manufacturer specifications
- 1.4** Obtain and confirm operational, administrative and emergency response orders and procedures
- 1.5** Select and use appropriate personal protective equipment
- 1.6** Apply work health and safety (WHS)/occupational health and safety (OHS) requirements and safety precautions in accordance with operational procedures and emergency response plan
- 1.7** Identify and apply environmentally sustainable work practices, as required
- 1.8** Complete appropriate documentation or records as required

2 Receive fuel from ship

- 2.1** Connect TFB to ship's pipeline in preparation for fuel transfer operations
- 2.2** Conduct pre-operation checks in accordance with task instructions
- 2.3** Test fuel for contamination, record results and quarantine defective product as required
- 2.4** Transfer fuel in accordance with task instructions
- 2.5** Disconnect TFB from refuelling ship in accordance with operational procedures

3 Issue fuel from TFB system to shore

- 3.1** Connect power pack, hydraulic lines and floating pipeline system to manifold raft
- 3.2** Connect TFB to manifold raft

- 3.3** Conduct pre-operation fuel transfer checks in accordance with manufacturer specifications and operational procedures
 - 3.4** Transfer fuel to meet task requirements
 - 3.5** Monitor petroleum equipment during transfer and report or rectify faults in accordance with emergency response plan
 - 3.6** Monitor fuel transfer gauges
 - 3.7** Maintain communication with team members and relevant personnel during fuel transfer operations
 - 3.8** Disconnect TFB from manifold raft
 - 3.9** Inspect floating pipeline system with a pipeline inspection gauge in accordance with manufacturer specifications
 - 3.10** Recover equipment safely
- 4 Finalise operations**
 - 4.1** Clean and restow TFB system equipment
 - 4.2** Inspect equipment for damage in accordance with operational procedures
 - 4.3** Conduct maintenance and minor repairs, as required, ensuring compliance with environmental procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to DEFPE007A Assist in the operation of the towed flexible

barge system.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

Assessment Requirements for DEFPET007 Assist in the operation of the towed flexible barge system

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- applying relevant legislation, and organisational policies and procedures
- applying Australian dangerous goods codes including:
 - segregation and storage requirements
- assisting in the operation of a towed flexible barge (TFB) system and must include one of the following:
 - TFB being refuelled at sea
 - TFB being moored offshore and fuel being transferred to shore via a floating pipeline system
- controlling fuel spills
- identifying hazards, assessing risks and implementing control measures
- interpreting technical diagrams and publications
- interpreting fuel markings and panels
- operating fuel pumping and discharge systems
- dealing with difficulties encountered during assembly
- selecting and fitting appropriate personal protective equipment
- implementing environmentally sustainable work practices
- responding to emergencies in accordance with emergency response plans
- pressuring pipeline system with air
- testing for leaks
- handling cleaning chemicals safely.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- Australian dangerous goods codes including:
 - segregation and storage requirements
- cleaning procedures and use of cleaning agents
- dangerous goods handling procedures

- emergency response plan
- functions and responsibilities of team members
- hazard control methods associated with fuel products
- maintenance procedures for fuel storage mediums
- relevant maritime dangerous goods marine orders
- relevant legislation, and organisational policies and procedures
- relevant work health and safety, pollution control legislation and policies
- TFB system.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations, where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, safety equipment and personal protective equipment currently used in industry including:
 - TFB system, discharge system and associated equipment
 - bulk fuel tankers or simulated platform
 - suitable fuel products
 - specific workplace operating procedures and publications
- applicable documentation including operational procedures, regulations, codes of practice and operation manuals.

Links

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