



Australian Government

Department of Education, Employment and Workplace Relations

UEGNSG601A Assess the operational capability of gas safety equipment on tankers

Release: 1

UEGNSG601A Assess the operational capability of gas safety equipment on tankers

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

1)

This Unit covers the assessment of the gas and safety equipment on a tanker for the distribution of LPG. It includes assessing the equipment, identifying faults, using standard operating procedures, liaising with appropriate persons, conducting inspections and tests tankers/vehicles as is detailed in the National Road Transport competency standards TDTC407A and TDTC597A. Tankers include heavy rigid or heavy combination truck.

Application of the Unit

Application of the Unit

3)

This competency standard shall apply to work sites where the distribution of liquefied petroleum gas occurs.

Licensing/Regulatory Information

License to practice

3.1)

The skills and knowledge described in this unit are not subject to licence regulation other than those directly related to Occupational Health and Safety, gas/electricity/water industry safety and compliance, industrial relations, environmental protection, telecommunications, anti discrimination and training. Commonwealth, State/Territory or Local Government legislation and regulations may exist that limits the age of operating certain equipment.

Pre-Requisites

Prerequisite Unit(s) 2)

Competencies 2.1)

Granting of competency in this unit shall be made only after competency in the following unit(s) has/have been confirmed:

Nil

Employability Skills Information

Refer to the Evidence Guide

Elements and Performance Criteria Pre-Content

5) Elements describe the essential outcomes of a competency standard unit Performance Criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Prepare to assess gas and safety equipment on tankers in accordance with requirements and standard operating procedures	1.1 Work instructions are received and confirmed according to standard operating procedures
	1.2 Relevant requirements and established procedures to be followed for the work to be performed are discussed with all persons to establish and confirm the work schedule
	1.3 OHS, environmental and sustainable energy policies and procedures to be followed for the work to be performed are received and confirmed

ELEMENT**PERFORMANCE CRITERIA**

	1.4	Suggestions to assist with the assessing the operational capability of gas safety equipment on tankers are made to others involved in the work
	1.5	Hazards are identified, OHS risks assessed and control measures are prioritised, implemented and monitored including emergency exits kept clear according to established procedures
	1.6	Scope of responsibility under the relevant work permit is received and confirmed according to requirements and established procedures with relevant persons where applicable
	1.7	Resources including equipment and tools are visually inspected and personal protective equipment required for the job are obtained and in working order according to established procedures
	1.8	All components of the tanker and associated equipment are checked and the relevant responsibilities associated with First Aid and other related work safety procedures at the worksite are confirmed in accordance with requirements and established procedures.
	1.9	Client issues are referred to appropriate persons in accordance with industry community standards
	1.10	Inspection procedures are carried out according to manufacturer's specifications and the work schedule for a quality outcome and to minimise risk and damage to property, commerce and individuals in accordance with established procedures
2	Identify and assess faults of gas and safety equipment on tankers	
	2.1	OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards
	2.2	Lifting, climbing, working in confined spaces and aloft, and use of power tools, techniques and practices are safely followed in accordance with given instructions and according to requirements

ELEMENT**PERFORMANCE CRITERIA**

		confirmed to eliminate the prospects of incidents
	2.3	Operational knowledge for the assessing of the operational capability of gas safety equipment on tankers is confirmed to ensure completion in an agreed timeframe and to quality standards with a minimum of waste according to requirements and established procedures
	2.4	Assessing the operational capability of gas safety equipment on tankers is carried out in accordance with requirements and given instructions and established procedures
	2.5	Hazard warnings and safety signs are recognised and hazards and assessed OHS risks are reported to the immediate authorised persons for directions according to established procedures
	2.6	Non-routine events are referred to the immediate authorised persons for directions according to established procedures
	2.7	Problems associated with the assessing of the operational capability of gas safety equipment on tankers are dealt with using acquired known solutions and skills related to routine procedures to ensure work instructions and established procedures are met
	2.8	Records are maintained and ongoing checks of quality of the work are undertaken in accordance with given instructions and established procedures
3	Complete assessment and report results of inspection and testing of gas safety equipment on tankers	3.1 Work undertaken is checked against work schedule and anomalies reported to authorised persons in accordance with established procedures
		3.2 Accidents and incidents are actioned and reported to authorised persons in accordance with established procedures
		3.3 Work site is rehabilitated, cleaned up and made safe in accordance with given instructions and established procedures

ELEMENT**PERFORMANCE CRITERIA**

- 3.4 Tools, equipment and any surplus resources and materials are, where appropriate, cleaned, checked and returned to storage in accordance with established procedures
- 3.5 Results of inspection and testing are accurately recorded and Appropriate persons are notified of work completion according to established procedures
- 3.6 Clear reference is made to any items which may affect future operational outcomes and work completion records, report forms and data sheets are completed accurately in accordance with given instructions and established procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Evidence shall show that knowledge has been acquired of safe working practices for assessing the operational capability of gas safety equipment on tankers. The extent of the essential knowledge and associated skills required is given in Volume 2 Part 2.2.

- G 2.1.1 Working in the gas sector
- G 2.1.2 Identify roles of statutory authorities
- G 2.1.3 Identify employment roles and responsibilities
- G 2.1.4 Apply relevant OHS regulations, policies and procedures
- G 2.1.5 Maintain safe, clean and healthy workplace
- G 2.1.6 Work safely with hazardous materials and equipment
- G 2.1.7 Apply safe manual handling techniques in the workplace

REQUIRED SKILLS AND KNOWLEDGE

- G 2.1.8 Control traffic at the work site
- G 2.1.9 Respond to emergency and accident situations
- G 2.1.10 Apply relevant environmental legislation, regulations and codes of practice
- G 2.1.11 Protect and maintain the environment
- G 2.1.12 Communicate in the workplace
- G 2.1.13 Communicate effectively in a team
- G 2.1.14 Read and interpret workplace documents
- G 2.1.15 Complete routine workplace forms, memos and reports
- G 2.1.16 Identify requirements of work activity
- G 2.1.17 Apply basic planning skills
- G 2.1.18 Conduct tasks to complete work activity
- G 2.1.19 Review work activity
- G 2.1.20 Customer relations
- G 2.1.21 Problem solving
- G 2.1.22 Confined spaces
- G 2.6.1 Occupational Health and Safety for working with LPG gas
- G 2.6.2 Diagnose and rectify faults for LPG
- G 2.6.3 Operate equipment within its limitations

Evidence Guide

EVIDENCE GUIDE

8) The Evidence Guide forms an integral part of this Unit and shall be used in conjunction with all components parts of the unit and performed in accordance with the Assessment Guidelines of this Training Package.

Overview of Assessment

8.1)

Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the Industry's preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accord with Industry and Regulatory policy in this regard.

Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.

The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Hence, sources of evidence need to be 'rich' in nature so as to minimise error in judgment.

Activities associated with normal every day work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practiced. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included for Assessors in the Assessment Guidelines of this Training Package.

Critical aspects of evidence required

8.2)

Before the critical aspects of evidence are considered all

EVIDENCE GUIDE

to demonstrate competency in this unit

prerequisites shall be met.

Evidence for competence in this unit shall be considered holistically. Each element and associated Performance Criteria shall be demonstrated on at least two occasions in accordance with the 'Assessment Guidelines UEG06'. Evidence shall also comprise:

- A representative body of Performance Criteria demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:
 - Implement Occupational Health and Safety workplace procedures and practices including the use of risk control measures as specified in the Performance Criteria and range
 - Apply sustainable energy principles and practices as specified in the Performance Criteria and range
 - Demonstrate an understanding of the essential knowledge and associated skills as described in this unit to such an extent that the learner's performance outcome is reported in accordance with the preferred approach; namely a percentile graded result, where required by the regulated environment
 - Demonstrate an appropriate level of skills enabling employment
 - Conduct work observing the relevant Anti discrimination legislation, regulations, policies and workplace procedures
 - Demonstrate performance across a representative range of contexts from the prescribed items below.

Range of tools/equipment/materials/procedures/ workplaces/other variables		
Group No	The minimum number of items on which skill is to be demonstrated	Item List
A	At least 6	Tanks, valves and fittings Seals and gaskets Pump and drive shaft Meters Emergency equipment

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		Pipes Pneumatic/electronic control equipment Gauges Hoses and connections including hose protection systems Earthing straps Hydraulic equipment
B	At least 4	Water leaks Oil leaks Damaged hoses Gas/air leaks Valves not operating Electric control cable damage
C	All	Work utilising relevant OHS legislation, regulations, codes of practice, policies and procedures Working knowledge of AS 2865 Maintain a safe and clean workplace Work safely with hazardous materials and equipment Apply safe manual handling techniques Respond to emergency situations Communicate effectively in the workplace Apply basic planning skills Diagnose and rectify faults for LPG Operate equipment within its limitations
D	At least one occasion	Deal with an unplanned event by drawing on essential knowledge and associated skills to provide appropriate solutions incorporated in the holistic assessment with the above listed items

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Context of and specific resources for assessment

8.3)

This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include:

- OHS policy and work procedures and instructions.
- Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed by this Competency Standard Unit.
- Appropriate environmental regulation and work practices.
- Appropriate organisational requirements.
- Appropriate work environment, equipment and tools.

In addition to the resources listed above, in Context of and specific resources for assessment, evidence should show demonstrated competency in assessing the operational capability of gas safety equipment on tankers.

Assessment of this competency must also be undertaken in either an actual workplace or under a simulated work environment. Assessment must also integrate the Key Competencies.

Method of assessment

8.4)

This Competency Standard Unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.

Note:

Competent performance with inherent safe working practices is expected in the Industry to which this Competency Standard Unit applies. This requires that the specified Essential Knowledge and Associated Skills are assessed in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the essential knowledge and associated skills described in this unit.

Concurrent assessment and relationship with other units

8.5)

There are no recommended concurrent assessments with this unit, however in some cases efficiencies may be gained in terms of learning and assessment effort being concurrently managed with allied Competency Standard Units where listed.

UEGNSG102 Carry out work activities in a utilities industry work environment

UEGNSG103 Comply with workplace OHS procedures and

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A practices

UEGNSG104 Comply with environmental policies and
A proceduresUEGNSG105 Establish the work site
A**Key Competencies 8.6)**

Evidence that particular Key Competencies have been achieved within this Competency Standard Unit is in the context of the following Performance Criteria of evidence. See Volume 2, Part 4 for an explanation of Key Competencies and levels of this Training Package.

Key Competencies	Example of Application	Performance Level
How are ideas and information communicated within this competency?	Refer to the following Performance Criteria for examples of application: 1.4; 2.6; 3.5	2
How can information be collected, analysed and organised?	Refer to the following Performance Criteria for examples of application: 1.5; 2.5; 3.1; 3.	1
How are activities planned and organised?	Refer to the following Performance Criteria for examples of application: 1.2	2
How is team work used within this competency?	Refer to the following Performance Criteria for examples of application: 1.2; 1.4	1
How are mathematical ideas and techniques used?	Refer to the following Performance Criteria for examples of application:	N/A

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How are problem solving skills applied?	Refer to the following Performance Criteria for examples of application:	N/A
How is use of technology applied?	Refer to the following Performance Criteria for examples of application:	N/A

Skills Enabling Employment**8.7)**

Evidence that competency in this unit incorporates skills enabling employment is in the context of the following performance. See Volume 2, Part 5 for definitions and an explanation of skills enabling employment.

Skills for Employment		Example of Application
1	Developing and using skills within a real workplace	Refer to the following Performance Criteria for examples of application: All
2	Learning to learn in the workplace	Refer to the following Performance Criteria for examples of application: 1.1; 1.5
3	Reflecting on the outcome and process of work task	Refer to the following Performance Criteria for examples of application: 3.1; 3.6
4	Interacting and understanding of the context of the work task	Refer to the following Performance Criteria for examples of application: 1.2; 2.5; 2.8; 3.3
5	Planning and organising the meaningful work task	Refer to the following Performance Criteria for examples of application: 1.4; 1.5; 1.7

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6	Performing the work task in non-routine or contingent situations	Refer to the following Performance Criteria for examples of application: 2.6; 2.7
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Range Statement**RANGE STATEMENT**

7) This relates to the competency standard unit as a whole providing the range of contexts and conditions to which the Performance Criteria apply. It allows for different work environments and situations that will affect performance.

This Competency Standard Unit shall/may be demonstrated in relation to assessing the operational capability of gas safety equipment on tankers.

The following constants and variables included in the element/Performance Criteria in this unit are fully described in the Definitions Section of this volume and form an integral part of the Range Statement of this unit:

Equipment (2)

Faults

Standard operating procedures (2)

Appropriate persons (2)

Inspection and testing (2)

Tankers

Requirements

Established procedures

Unit Sector(s)

Not Applicable

Literacy and numeracy skills

Literacy and numeracy skills

2.2)

Participants are best equipped to achieve this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading 3 Writing 3 Numeracy 3

Competency Field

Competency Field

4)

LPG.