



Australian Government

UEGNSG616A Refurbish gas cylinders

Release 1

UEGNSG616A Refurbish gas cylinders

Modification History

This unit replaces UEGNSG605B Refurbish gas cylinders

Unit Descriptor

Unit Descriptor

1) Scope:

1.1) Descriptor

This unit covers inspecting, testing and refurbishing approved liquefied petroleum gas (LPG) cylinders accordance with relevant legislation, codes, regulations and established procedures.

It encompasses following procedures to correctly and safely carry out the work using appropriate materials, tools and equipment.

Application of the Unit

Application of the Unit 2)

This competency standard shall apply to work sites where LPG gas cylinders are refurbished and filled for distribution, subject to all Workplace Health and Safety (WHS)/Occupational Health and Safety (OHS) and duty of care requirements being met for the workplace.

This unit is intended as an entry level AQF 2 competency for new entrants in the gas industry. It is suitable for employment-based programs under an approved contract of training.

Licensing/Regulatory Information

License to practice 3)

During Training:

Competency development activities are subject to regulations directly related to licensing, occupational health and safety and where applicable contracts of training such as apprenticeships.

In the workplace:

The skills and knowledge described in this unit are subject to license regulation. The work site must be registered and certified as a cylinder test station with LPG cylinders on the scope of registration.

Competency can only be applied under the supervision of a test station signatory unless certified by SAI Global as a test station signatory. Commonwealth, State/Territory or Local Government legislation and regulations may exist that limits the age of operating certain equipment. Other conditions may apply to this competency under State and Territory legislative and regulatory requirements.

Pre-Requisites

Prerequisite Unit(s) 4)

Competencies 4.1)

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

- | | |
|------------|--|
| UEGNSG141A | Apply Workplace Health and Safety regulations, codes and practices in the gas industry |
| UEGNSG005A | Prepare to work in the Australian gas industry |

Literacy and numeracy skills 4.2)

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

Employability Skills Information**Employability Skills 5)**

This unit contains Employability Skills

The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

Elements and Performance Criteria Pre-Content

6) *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 refurbish LPG cylinders**

- 1.1 Work instructions are received and confirmed
- 1.2 Relevant requirements and established procedures to be followed for the work to be performed are discussed with all persons to

ELEMENT	PERFORMANCE CRITERIA
	establish and confirm the work schedule
	1.3 WHS/OHS, environmental and sustainable energy policies and procedures to be followed for the work to be performed are received and confirmed
	1.4 Appropriate persons are consulted to ensure the work is coordinated effectively and suggestions to assist with the refurbishing of gas cylinders are made to others involved in the work
	1.5 Hazards are identified, WHS/OHS risks assessed and control measures are prioritised, implemented and monitored according to established procedures
	1.6 Materials, tools and personal protective equipment required for the job are obtained and in working order according to established procedures
	1.7 Relevant responsibilities associated with related work safety procedures at the worksite are confirmed in accordance with requirements and established procedures to ensure safety measures are followed.
	1.8 Client issues are referred to appropriate persons in accordance with industry and community standards
	1.9 Site is prepared according to given instructions 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 Inspect and refurbish LPG cylinders	2.1 WHS/OHS policies and procedures and safe work practices are followed to eliminate or minimise incidents and hazards
	2.2 Lifting, climbing and use of tools, techniques and practices are safely followed in accordance with given instructions and according to requirements confirmed to eliminate the prospects of incidents

ELEMENT**PERFORMANCE CRITERIA**

	2.3	Operational knowledge for the refurbishing of gas cylinders is confirmed to ensure completion in an agreed timeframe and to quality/ safety/ environmental standards according to requirements and established procedures
	2.4	The refurbishing of gas cylinders is carried out in accordance with given instructions and established procedures
	2.5	Hazard warnings and safety signs are recognised and hazards and assessed WHS/OHS risks are reported to the immediate authorised persons for directions according to established procedures
	2.6	Cylinders that are damaged or do not comply to standards are coded and condemned according to established procedures
	2.7	Non-routine events are referred to the immediate authorised persons for directions according to established procedures
	2.8	Problems associated with the refurbishing of gas cylinders are dealt with using acquired known solutions and skills related to routine procedures to ensure work instructions and established procedures are met
	2.9	Ongoing checks of quality of the work are undertaken in accordance with given instructions and established procedures
3 Complete work and relevant documentation	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 Inspection results and completion processes are performed according to established procedures
- 3.6 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

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

Evidence shall show that knowledge has been acquired of safe working practices for the inspection and refurbishment of LPG cylinders.

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies. The extent of the required skills and knowledge is provided below. It forms an integral part of this unit.

KS01-G616A LP Gas cylinders inspection and refurbishment

Evidence shall show an understanding of inspecting and refurbishment of liquefied petroleum gas (LPG) cylinders in accordance with relevant legislation, codes, regulations and established procedures to an extent indicated by the following aspects:

T1. Relevant Australian Standards, guidelines and codes of practice including AS1596 and AS2030 or replacements

T2. Relevant OHS policies and procedures.

- Safety signs including workplace hazards and warnings

T3. LPG cylinders

- Properties of LP Gas
- Types, construction, size, valves, labelling, Material Safety Data Sheets (MSDS)
- Handling
- Inspection requirements, types, procedures, required equipment/tools
- Leak testing requirements, types, procedures, required equipment/tools
- Condemning and disposal
- Refurbishment requirements, types, procedures, required equipment/tools

T4. Personal Protection Equipment

- Types, application, checking, maintenance and storage

T5. Hazard identification, risk assessment and control

- Work Permits, JHA's, JSA's, JSEA's, SWM's, etc.
- Use of spill kits and PPE

T6. Manual handling

- Characteristics, types, techniques

REQUIRED SKILLS AND KNOWLEDGE

T7. Accidents and emergency

- Types: fire, gas leak
- Emergency equipment and procedures
 - breathing apparatus
 - gas detectors/oxygen monitoring devices
- Reporting

T8. Organisation's policies, quality requirements, specifications, forms and reports for work activity

Evidence Guide

EVIDENCE GUIDE

8) The Evidence Guide forms an integral part of this Competency Standard Unit and shall be used in conjunction with all components parts of this 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 9.2)
of evidence
required to
demonstrate
competency in
this unit**

Before the critical aspects of evidence are considered all 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 — UEG11'. Evidence shall also comprise:
 - A representative body of work performance 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 required skills and knowledge 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 employability skills
 - 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.
 - Inspecting and refurbishing liquefied petroleum gas (LPG) cylinders in accordance with relevant legislation, codes, regulations and established procedures as described in 9.) Range Statement and including:

Range of tools/equipment/procedures/workplace		
Group	The minimum number of items on which skill is to be demonstrated	Item List
A. Tools/equipment	At least 10	• Liquid withdrawal valves • Vapour service

		valves • Relief valves • Contents gauges • In situ fill valves • Multiport valves • Ullage tubes • LPG cylinders • Cylinder inverter • Decanting equipment • De-valving/re-valving tools • Date and test station stamping tools • Callipers • Stencils and decals • Cylinder destruction • Scales • Hand tools • Test equipment
B. Procedures	All	• Clean • Paint • Refurbish • Correct storage • Quarantine, purge, destroy and dispose of condemned cylinders
C. Inspection/test procedures	All	The following inspection checks are made and met requirements before returning cylinder to service: • Test date • Ownership • Corrosion and impact damage • Tare weight • Valve and thread condition

		• Safety relief valve capped and free from obstruction • Internal deposits • Paintwork • Fire/heat damage • Stencilling and decals appropriate to cylinder type • Leak test
D. Recording procedures	All	• Standard operation procedures • Emergency procedures and response action • State regulations/statutes and permits • Record inspection/refurbishment information accurately on gas industry forms and reports according to legislative requirements and established procedures
E. Unplanned event	At least one occasion	Deal with an unplanned event by drawing on required skills and knowledge to provide appropriate solutions incorporated in the holistic assessment with the above listed items

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.
- These should be part of the formal learning/assessment environment.

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

Note:

Where simulation is considered a suitable strategy for assessment, conditions must be authentic and as far as possible reproduce and replicate the workplace and be consistent with the approved industry simulation policy.

The resources used for assessment should reflect current industry practices in relation to locating, proving and protecting utility assets.

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 Required Skills and Knowledge 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 required skills and knowledge described in this unit.

**Concurrent
assessment and
relationship
with other units****9.5)**

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.

UEGNSG132A	Carry out basic work activities in a gas industry work environment
UEGNSG141A	Apply Workplace Health and Safety regulations codes and practices in the gas industry
UEGNSG140A	Apply environmental policies and procedures in the utilities industry
UEGNSG134A	Establish a utilities infrastructure work site

Range Statement

RANGE STATEMENT

9) *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 be demonstrated in relation to inspecting and refurbishing PLG cylinders at a work site registered and certified as a LPG cylinder test station, in accordance with relevant legislation, codes, regulations and established procedures.

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:

- Appropriate Persons
- Test Station
- Materials
- Tools and Equipment
- Inspection Checks
- Damage to Cylinders
- Testing

Unit Sector(s)

Not applicable.

Competency Field

Competency Field **11)**
LPG.