



**Australian Government**

# **UEGNSG618 Process liquefied petroleum gas (LPG)**

**Release: 1**

# UEGNSG618 Process liquefied petroleum gas (LPG)

## Modification History

Release 1. This is the first release of this unit of competency in the UEG Gas Training Package.

## Application

This unit involves the skills and knowledge required to process liquefied petroleum gas (LPG).

It includes processing and monitoring LPG; applying relevant emergency response procedures in an emergency; using appropriate materials, tools and equipment; and completing relevant documentation.

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

## Pre-requisite Unit

Not applicable

## Competency Field

Gaseous Fuel Vessels

## Unit Sector

Gas Industry

## Elements and Performance Criteria

### ELEMENTS

Elements describe the essential outcomes.

#### 1 Prepare to process LPG

### PERFORMANCE CRITERIA

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

- 1.1 Mix/blend properties, specifications, requirements and workplace procedures for the LPG transfer are obtained for work sites and communicated to relevant person/s in accordance with workplace procedures
- 1.2 Tank/s, pipelines and hoses are connected in accordance with manufacturer specifications and workplace procedures

- 1.3** Appropriate valves are operated in the correct sequence and workplace procedures for the work are obtained for all work sites and communicated to relevant person/s in accordance with workplace procedures
  - 1.4** Work health and safety (WHS)/occupational health and safety (OHS), environmental and sustainable energy policies and procedures for processing LPG are obtained and communicated to relevant person/s
  - 1.5** Work is prioritised and sequenced for completion within acceptable timeframes following consultation with relevant person/s in accordance with workplace procedures
  - 1.6** Hazards and WHS/OHS risks are identified and prioritised and control measures implemented and monitored
  - 1.7** Relevant work permits/authorisations are obtained to access, isolate/de-energise systems and perform the work in accordance with regulatory requirements and workplace procedures
  - 1.8** Appropriate equipment, tools and personal protective equipment (PPE) required for the job are identified, scheduled, obtained and checked for correct operation and safety in accordance with workplace procedures
  - 1.9** Communication with authorised person/s, authorities, clients and land owners is conducted and work coordinated in accordance with work schedule and workplace procedures
  - 1.10** Site is prepared to minimise risk and damage to property, commerce and individuals in accordance with work schedule and workplace procedures
  - 1.11** Person/s participating in the work, including plant operators and contractors, are briefed and responsibilities coordinated in accordance with workplace procedures
- 2 Conduct LPG processing**
- 2.1** WHS/OHS risk control measures and policies and procedures are followed in accordance with workplace procedures
  - 2.2** Hazardous activities are performed safely and currency maintained, as required, in accordance with regulatory

requirements and workplace procedures

- 2.3** LPG is processed ensuring completion in agreed timeframes with a minimum of waste and damage to the surrounding environment or services and using sustainable energy principles
- 2.4** LPG is processed and controls adjusted and monitored in accordance with work schedule, job requirements and workplace procedures
- 2.5** Hazard warnings and safety signs are recognised, hazards and WHS/OHS risks assessed and reported to authorised person/s for directions in accordance with workplace procedures
- 2.6** Unplanned events encountered in the processing of LPG are responded to in accordance with emergency response procedures
- 2.7** Fault-finding and troubleshooting techniques are applied to problems encountered when processing LPG in accordance with workplace procedures
- 2.8** Quality and safety checks of work are conducted in accordance with work instructions and workplace procedures

### **3 Complete work and relevant documentation**

- 3.1** Work undertaken is checked against work schedule for conformance and anomalies reported in accordance with workplace procedures
- 3.2** Accidents and injuries are reported in accordance with requirements and workplace procedures
- 3.3** Shutdown of LPG processing equipment is completed in accordance with workplace procedures and operating conditions
- 3.4** Tools, equipment and any surplus resources and materials are, cleaned, checked and returned to storage in accordance with workplace procedures
- 3.5** Relevant work permit/s are signed off and equipment is returned to service in accordance with requirements and workplace procedures
- 3.6** Work completion records and reports are completed, processed and appropriate person/s notified in

accordance with workplace 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 UEG Gas Industry Training Package Companion Volume Implementation Guide.

monitoring checks must include at least four (4) of the following:

- stock levels
- pressures
- gas heating valves
- shutdown system
- molecular sieve de-odourisation
- aeration

processing LPG must include the following:

- blending/mixing LPG
- manufacturing LPG
- de-odourising LPG

## Unit Mapping Information

This unit replaces and is equivalent to UEGNSG618A Process Liquefied Petroleum Gas (LPG).

## Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6a6c032e-ffcb-4f3d-8063-415efbd261e8>

# Assessment Requirements for UEGNSG618 Process liquefied petroleum gas (LPG)

## Modification History

Release 1. This is the first release of this unit of competency in the UEG Gas Training Package.

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- applying relevant industry standards, guidelines, codes of practice and regulations
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
  - hazard identification and reporting
  - implementing risk control measures
  - selecting and using correct personal protective equipment (PPE)
  - work safely with hazardous materials and equipment
- applying sustainable energy and environmental principles and practices
- communicating with relevant person/s
- completing shutdown
- completing work and relevant documentation
- conducting quality and safety checks
- connecting pipelines and hoses
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- following procedures for emergency response, including:
  - equipment failure
  - gas leaks and fire
  - hazards and incidents
- following workplace procedures
- identifying and reporting anomalies
- isolating and de-energising systems
- monitoring and adjusting controls
- obtaining and complying with relevant work permits/authorisations
- obtaining and using relevant equipment, including
  - control and monitoring equipment
  - mixing/sampling equipment
  - pumps

- valves
- vessels
- operating valves in correct sequence
- preparing to process liquefied petroleum gas (LPG)
- processing LPG
- reporting anomalies.

## Knowledge Evidence

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

- compliance requirements
- equipment/tools, including:
  - analytical judgements for appropriate adjustments to plant and equipment
  - types, selection, manufacturer specifications/instructions, testing and set up
  - variations and irregularities identification
- fault-finding and troubleshooting techniques
- hazardous activities, including lifting, climbing, working in confined spaces or aloft, and use of power tools
- LPG processing, including:
  - requirements, applications, methods and procedures
  - gas analysis equipment
  - gas alarm and communication equipment
- oral and written communication techniques
- product specifications and quality assurance documentation
- quality and safety checks
- relevant industry standards, guidelines, codes of practice and regulations
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements, including:
  - emergency response equipment and procedures
  - environmental and sustainable energy principles and practices
  - hazard warnings and safety signs
  - hazardous materials
  - hazards, risk assessment and control measures
  - responding to emergency and accident situations
  - safe manual handling techniques
  - use of spill kits and PPE
- relevant work permits/authorisations

- relevant workplace policies and procedures
- relevant workplace reporting requirements and documentation
- shutdown procedures
- workplace quality requirements and specifications.

## 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 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.

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.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

## Links

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