



Australian Government

TLIC0003 Operate LP gas tanker

Release: 2

TLIC0003 Operate LP gas tanker

Modification History

Release 2. This is the second release of this unit of competency in the TLI Transport and Logistics Training Package:

- Element 6 changed to: Check site to accept delivery
- Minor statement changes in Assessment Conditions.

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to operate a liquid petroleum (LP) gas tanker in accordance with the current Australian Dangerous Goods (ADG) Code, mass and loading regulations, and relevant state/territory road and traffic authority vehicle licence requirements and regulations for heavy vehicles.

It includes recognising the characteristics of LP gas and LP gas tankers to ensure safe transfer and transport of LP gas, conducting pre-trip inspections, supervising loading and transporting load to customer site. It also includes preparing a site to accept delivery, managing delivery, completing post-delivery activities and following emergency procedures.

An LP gas tanker is defined as any bulk road transport vehicle authorised to carry Class 2 liquid gases.

An LP gas tanker is operated with limited or minimum supervision, and with accountability and responsibility for self and others in achieving the prescribed outcomes.

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

Pre-requisite Unit

TLILIC0001 Licence to transport dangerous goods by road

Competency Field

C – Vehicle Operation

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Recognise the characteristics of LP gas and LP gas tankers to ensure safe transfer and transport of LP gas

2 Comply with legislative and organisational requirements for safe transfer and transport of LP gas

3 Conduct pre-trip inspection

PERFORMANCE CRITERIA

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

- 1.1** Properties of LP gas being transported are identified in accordance with emergency response documentation
- 1.2** Hazards associated with LP gas transport are clarified in accordance with emergency response documentation
- 1.3** Hazardous atmosphere zones are determined in accordance with organisational requirements
- 1.4** Functions of equipment fitted to an LP gas tanker are identified
- 1.5** Factors that cause static electricity and ways of minimising associated risks are identified in accordance with organisational requirements
- 2.1** United Nations (UN) number, product class, packaging group and any sub-risks of LP gas being transported are identified in accordance with emergency response documentation
- 2.2** Requirements for LP gas being transported are identified in accordance with the current ADG Code and legislative requirements
- 3.1** Tanker is checked to ensure dangerous goods (DG) compliance plate is attached to tanker in accordance with current ADG Code requirements
- 3.2** Tanker load transfer equipment is checked to confirm security and state of repair, and that all hoses are tested and tagged in accordance with current ADG Code requirements
- 3.3** Tanker is checked to ensure safety equipment is accessible, properly maintained, and stowed and secured in accordance with current ADG Code requirements

- 3.4 Tanker is checked to ensure personal protective equipment (PPE) is available, ready for use and meets current ADG Code requirements
 - 3.5 Tanker is checked to ensure DG placards are correct for load and are displayed in accordance with current ADG Code requirements
 - 3.6 Fire extinguisher is checked for current date and pressure gauge
 - 3.7 Shipping documentation is checked for accuracy and availability of emergency information in accordance with current ADG Code requirements
 - 3.8 Non-compliant vehicles and equipment are reported in accordance with organisational procedures
- 4 **Supervise loading**
 - 4.1 Tanker is driven into loading site in accordance with site procedures
 - 4.2 Tanker is positioned to enable loading to be carried out in accordance with site procedures without injury to people or damage to property
 - 4.3 Park brake is applied, engine is turned off and battery is isolated, as required
 - 4.4 PPE is used in accordance with site and organisational procedures
 - 4.5 Transfer equipment is checked for compatibility
 - 4.6 Loading activities are controlled within level of responsibility
 - 4.7 Emergency procedures are followed in a spill or leak during loading
 - 4.8 Strategies to minimise risks associated with static electricity are employed in accordance with organisational requirements
- 5 **Transport load to customer site**
 - 5.1 Routes are planned to avoid congested areas, tunnels or areas where people may congregate and to maximise efficiency between delivery sites
 - 5.2 Planned or prescribed routes are followed in accordance with regulatory and organisational requirements

- 5.3 Tanker is driven and manoeuvred in accordance with legal requirements, and vehicle stability and prevailing environmental conditions are considered
 - 5.4 Eco-driving techniques are applied, and courtesy and professionalism are exhibited toward other road users
 - 5.5 Action is taken to deal with traffic delays and diversions
 - 5.6 Legislative and organisational procedures are adhered to when driving, parking and leaving tanker standing, or when tanker breaks down or stops on a road
- 6 **Check site to accept delivery**
 - 6.1 Pre-delivery assessment is made before entering delivery site
 - 6.2 Site features that present a hazard and/or prevent delivery are rectified or reported in accordance with organisational requirements
 - 6.3 Site instructions and/or restrictions are complied with
 - 6.4 Tanker is manoeuvred and positioned to ensure product can be delivered safely and efficiently
 - 6.5 Park brake is applied, engine is turned off and battery is isolated, as required
 - 6.6 PPE is used in accordance with site and organisational procedures, and steps are taken to apply personal safety measures and to manage potential hazards
 - 6.7 Discharge area of delivery site is marked with signs and/or cones in accordance with workplace and state/territory legislative requirements
- 7 **Manage delivery**
 - 7.1 Visible receiving vessel and/or components are checked for damage
 - 7.2 Contents of receiving vessel/s are checked to ensure sufficient ullage exists for delivery
 - 7.3 Product type and quantity are confirmed against delivery documents
 - 7.4 Pressure gauges, valves, hoses and connections are visually checked for serviceability and leaks
 - 7.5 Vehicle and/or delivery site emergency shutdown is identified and checked in accordance with workplace

		requirements
	7.6	Hoses are connected for discharging to ensure correct product is delivered into correct vessel in correct sequence
	7.7	Product is delivered in accordance with organisational and site procedures, and special delivery instructions are observed
	7.8	Emergency procedures are followed in the event of a leak during delivery
	7.9	Strategies to minimise risks associated with static electricity are employed in accordance with organisational requirements
8	Complete post-delivery operations	
	8.1	Product transfer equipment is disconnected in accordance with product type and organisational procedures
	8.2	Site is secured and restored to a clean and tidy condition in accordance with site procedures
	8.3	Delivery documentation is completed in accordance with organisational procedures
	8.4	Shipping documentation is amended to reflect changes in vehicle load
	8.5	Pre-departure inspection of tanker is conducted in accordance with organisational procedures
	8.6	Tanker is driven safely from site in accordance with site procedures
9	Follow emergency procedures	
	9.1	Incident is reported to police or fire services as soon as possible
	9.2	Incident is reported to nominated person as soon as practicable in accordance with transport emergency response plan (TERP)
	9.3	Reasonable assistance with load content is provided to authorised officer and emergency management supervisor (EMS)
	9.4	Warnings are provided to other vehicles and persons in the vicinity who may be at risk

9.5 Escape of gas is prevented or minimised

9.6 Incident is reported in accordance within legislative requirements or as nominated in the TERP

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.

Equipment fitted to an LP gas tanker must include:

- breakdown triangles
- chemical resistant gloves
- deluge system
- emergency cones
- emergency information holder
- emergency shutdown controls
- evacuation procedures
- eyewash facility
- fire alarm
- fire extinguishers
- torch

Loading and unloading sites must include at least one of the following:

- customer site
- depot
- terminal

Documentation must include:

- emergency procedure guides
- shipping documentation
- state/territory road rules
- TERP

Unit Mapping Information

This unit replaces but is not equivalent to TLIC4067A Operate LP gas tanker.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIC0003 Operate LP gas tanker

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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, performance criteria and range of conditions on at least one occasion and include:

- applying correct placarding for product being loaded
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying techniques for loading and unloading a liquid petroleum (LP) gas tanker
- communicating effectively with others
- completing relevant documentation
- identifying eco-driving techniques
- identifying volume of goods
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- making accurate estimates of product volume in loading and unloading situations
- meeting customer requirements when delivering LP gas to customer site
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring and anticipating traffic hazards and taking appropriate action
- monitoring performance of vehicle, trailers and equipment, and taking appropriate action as required
- operating and adapting to differences in equipment in accordance with operating procedures
- reading and interpreting relevant instructions, procedures, information and signs
- selecting and using required personal protective equipment (PPE) conforming to industry and work health and safety (WHS)/occupational health and safety (OHS) standards
- working collaboratively with others
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

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:

- causal factors of LP gas tanker accidents and incidents
- effects of weight distribution on load behaviour and vehicle stability
- efficient driving techniques and eco-driving considerations
- factors involved in trip preparation
- factors that may cause traffic delays and diversions, and related actions that can be taken
- fatigue management strategies
- procedures to be followed in a driving emergency and in response to an emergency using a company transport emergency response plan (TERP)
- relevant dangerous goods (DG) information for operating an LP gas tanker
- relevant legislation and workplace procedures for transporting LP gas
- relevant state/territory road and traffic authority road rules, regulations, permits and licence requirements
- relevant WHS/OHS and environmental procedures
- safe delivery of LP gas to a customer site
- techniques and procedures for loading and unloading an LP gas tanker safely
- techniques to continually identify and mitigate environmental risks
- workplace documentation
- workplace driving and operational instructions.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations, with the exception of Element 9; due to workplace health and safety risks. Assessment of Element 9 must occur using simulations in workplace operational situations.

Practical assessment must be undertaken with an LP gas tanker that meets all industry compliance and/or licensing requirements.

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:

- eye wash kit, fire extinguisher, torch, chemical resistant gloves, and other PPE currently used in industry
- workplace procedures, current ADG Code, emergency procedure guides, emergency response documentation, shipping documentation and TERP.

A simulator is not suitable for final assessment of this unit of competency.

Links

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