



Australian Government

TLID3024 Use specialised liquid bulk transfer equipment (gravity/pressurised)

Release: 2

TLID3024 Use specialised liquid bulk transfer equipment (gravity/pressurised)

Modification History

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

- Minor changes to unit application
- Minor changes to performance criteria
- Minor changes to performance evidence
- Minor changes to knowledge evidence
- Minor changes to 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 use specialised liquid bulk transfer equipment (gravity/pressurised).

It includes planning work, transferring liquid bulk in accordance with regulatory and operational requirements, monitoring and operating controls, and completing all operations, as required, in accordance with the current Australian Dangerous Goods (ADG) Code and relevant state and/or territory regulations.

Work is performed under general supervision.

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

Pre-requisite Unit

Not applicable.

Competency Field

D – Load Handling.

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan work

PERFORMANCE CRITERIA

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

- 1.1** Liquid transfer method is identified for loading and unloading as gravity or pressure
- 1.2** Job hazards are identified and required actions taken to minimise, control or eliminate identified hazards
- 1.3** Dangerous goods, hazardous materials or regulated waste requiring specialised handling are identified and relevant workplace procedures are taken into account when planning work
- 1.4** Precautions are undertaken to eliminate all ignition sources
- 1.5** Traffic flow, vehicle positioning and work area conditions are assessed to ensure safe operation and no injury to people, or damage to equipment, loads or facilities
- 1.6** Characteristics of liquid, transfer and holding method are taken into account when evaluating procedural requirements, special precautions for method, equipment and, as required, appropriate attachments to transfer load
- 1.7** Potential occurrences in work area that may affect safety and efficiency of operations are reported to appropriate personnel
- 1.8** Liquid transfer is planned, taking into account requirements of load, transfer method, storage facility, transport mode, load weight, volume, viscosity and equipment capacity
- 1.9** Load is checked prior to and at completion of transfer to ensure ullage and/or maximum permitted capacity complies with current ADG Code
- 1.10** Adjustments are made to process to accommodate special requirements such as temperature control and combustion
- 1.11** Required personal protective equipment (PPE), signage, barriers and special precautions are identified in plan and utilised
- 1.12** Procedures to deal with spills, leakages and ruptures are identified

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|---------------------------------------|------------|---|
| 2 Transfer material | 2.1 | Equipment is prepared and appropriate attachments are fitted |
| | 2.2 | Equipment controls are checked for correct operational status before commencing transfer |
| | 2.3 | Instruments and gauges are monitored during operations to ensure operation is in accordance with manufacturer specifications, workplace schedule and safety requirements |
| | 2.4 | Speed of operation is managed for safety and efficiency of materials movement and equipment operations |
| | 2.5 | Faults or damage to equipment are immediately reported to appropriate personnel |
| 3 Monitor and operate controls | 3.1 | Equipment controls are monitored and operated in accordance with manufacturer operating instructions |
| | 3.2 | Control systems are monitored in accordance with statutory authority regulations, manufacturer guidelines and site operating procedures |
| | 3.3 | Materials are moved without injury to personnel or damage to equipment or goods |
| | 3.4 | Faults are identified and reported in accordance with workplace procedures |
| 4 Complete operations | 4.1 | Equipment is shut down in accordance with manufacturer guidelines without injury to personnel or damage to equipment, loads or facilities in accordance with workplace procedures |
| | 4.2 | Clean up methods for transfer equipment are completed in accordance with workplace procedures |
| | 4.3 | Equipment is secured in accordance with securing procedures for appropriate equipment |
| | 4.4 | Workplace documentation is completed and filed 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 can be found in the TLI Transport and Logistics Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLID3024A Use specialised liquid bulk transfer equipment (gravity/pressurised).

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 TLID3024 Use specialised liquid bulk transfer equipment (gravity/pressurised)

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Performance Evidence

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

- applying precautions and required actions to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- checking equipment compliance plate for equipment capability
- completing relevant documentation
- estimating mass, volume and special requirements of liquid bulk product
- identifying and correctly using equipment required to transfer liquid bulk product
- identifying goods coding, International Maritime Dangerous Goods (IMDG) Code markings and emergency information panels
- interpreting and following operational instructions and prioritising work
- monitoring transfer equipment performance
- operating and adapting to differences in transfer equipment in accordance with manufacturer and 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 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 the requirements of the elements and performance criteria and include knowledge of:

- Australian Dangerous Goods (ADG) Code and relevant state and/or territory mass and loading regulations as they apply to vehicles transporting liquid bulk product
- hazard management consistent with the principle of hierarchy of risk control with elimination, substitution, isolation and engineering control measures being selected before safe working practices and PPE
- hazards involved in transferring liquid bulk product using specialised equipment and ways and means of controlling the risks involved
- housekeeping standards and procedures
- manufacturer and operator instructions and/or manuals
- methods of securing a vehicle following transfer of liquid bulk product
- problems, faults or malfunctions that may occur when transferring liquid bulk product using specialised equipment and actions that should be taken to prevent or resolve these problems
- relevant permit, and health and safety requirements
- risks when transferring liquid bulk product and related precautions to control the risk
- WHS/OHS procedures and guidelines for using specialised liquid bulk transfer equipment
- workplace procedures and policies for efficiently using specialised gravity and/or pressurised equipment to transfer liquid bulk product.

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 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 simulations
- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including legislation, regulations, current ADG Code, codes of practice, workplace procedures and operation manuals.

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