TLID1607D Load and unload explosives and dangerous goods
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Modification History
Not applicable.

Unit Descriptor
This unit involves the skills and knowledge required to load and unload explosives and dangerous goods, including identifying explosives/dangerous goods; loading and unloading explosives/dangerous goods using appropriate equipment; securing and protecting the vehicle load; and checking the vehicle to ensure the load is secure and the vehicle is marked in accordance with regulatory requirements. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit
Work must be carried out in compliance with the relevant Australian and state/territory regulations including the current Australian Dangerous Goods (ADG) Code, the current Australian Explosives (AE) Code, and mass and loading regulations. Work is performed under limited or minimum supervision. It involves the application of the basic principles, routine procedures and specific regulatory requirements to the loading and unloading of explosives and dangerous goods in a range of operational situations.

Licensing/Regulatory Information
Refer to Unit Descriptor

Pre-Requisites
Not applicable.

Employability Skills Information
This unit contains employability skills.

Elements and Performance Criteria Pre-Content
Elements describe the essential outcomes of a unit of competency. 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

<table>
<thead>
<tr>
<th>Element</th>
<th>Performance Criteria</th>
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</thead>
<tbody>
<tr>
<td>1 Prepare to load and unload vehicle</td>
<td>1.1 Explosives and/or dangerous goods are identified and their characteristics taken into account when determining appropriate handling, loading and storage procedures including confirmation that the relevant emergency procedures are being carried out.</td>
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<td>1.2 Compatibility of explosives and/or dangerous goods is taken into account when assembling and segregating cargo for loading.</td>
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<td>1.3 Vehicle and/or loading equipment is checked to ensure it is suitable to handle/carry load.</td>
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<tr>
<td>2 Load/unload vehicle</td>
<td>2.1 Vehicle is loaded/unloaded in accordance with workplace procedures and the current ADG/Australian Explosives Code as applicable.</td>
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<td>2.2 The load is segregated according to class and subsidiary risk, and the distribution of the load is checked in accordance with workplace procedures, relevant mass and loading regulations and the current ADG/Australian Explosives Code as applicable.</td>
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<td>2.3 Personal protective equipment is used during the loading/unloading operations as required for the type of dangerous goods/explosive concerned.</td>
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<td>2.4 Emergency procedures are followed in the event of an incident or accident when loading or unloading explosives and/or dangerous goods.</td>
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<td>2.5 Emergency procedures are followed in the event of a safety incident or accident when loading dangerous goods or explosives.</td>
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<tr>
<td>3 Secure and protect vehicle load</td>
<td>3.1 The vehicle load is secured using the correct load restraint and protection equipment for different loads, vehicles and carriage conditions concerned.</td>
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<td>3.2 The load is protected in accordance with legal and workplace safety requirements.</td>
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</table>
3.3 The distribution of the load is checked to ensure that it is even, legal and within the safe working capacity of the vehicle

3.4 Vehicle is clearly marked/placarded to indicate the carriage of explosives and/or dangerous goods, in accordance with government regulations and company procedures

4 Check the vehicle

4.1 The loaded vehicle is inspected and checked to ensure that it is suitable to carry explosives and/or dangerous goods and the load weight and dimensions are within the vehicle's safe carrying capacity and equipment capability

4.2 The loaded vehicle is checked to ensure that it can be safely parked and secured

4.3 Dangerous goods declaration and all required transportation documentation for the cargo is completed in accordance with workplace requirements
Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

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

Required knowledge:

Relevant Australian and state/territory regulations and codes pertaining to the identification, handling and marking of explosives and dangerous goods

Relevant state/territory mass and loading regulations

OH&S procedures and guidelines concerning the lifting and movement of loads

Risks and hazards when loading, unloading and handling explosives and dangerous goods, and related precautions to control the risk

Workplace procedures and policies for the loading and unloading of explosives and dangerous goods

Characteristics of various classes of explosives and dangerous goods relevant to handling and transport

Compatibility of various types of explosives and dangerous goods

Housekeeping standards procedures required in the workplace

Manual handling techniques and manually-operated load shifting equipment required for the loading, unloading and handling of explosives and dangerous goods

Methods of securing a load on a vehicle

Methods of placarding or marking a vehicle carrying explosives/dangerous goods

Required skills:

Communicate effectively with others when loading, unloading and handling explosives and dangerous goods

Read and interpret instructions, procedures, information and signs relevant to the loading, unloading and handling of explosives and dangerous goods

Identify and interpret containers and goods coding, markings and, where applicable, emergency information panels for the mode of transport/storage selected

Interpret and follow operational instructions and prioritise work

Complete documentation related to work activities
Operate electronic communication equipment to required protocol

Estimate the size, shape and special requirements of loads

Work collaboratively with others when loading, unloading and handling explosives and dangerous goods

Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others

Promptly report and/or rectify any identified problems, faults or malfunctions in accordance with regulatory requirements and workplace procedures

Implement contingency plans for unexpected events when loading, unloading and handling explosives and dangerous goods

Apply precautions and required action to minimise, control or eliminate hazards that may exist during the loading, unloading and handling of explosives and dangerous goods

Monitor work activities in terms of planned schedule

Modify activities depending on differing operational contingencies, risk situations and environments

Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment

Operate and adapt to differences in equipment in accordance with standard operating procedures

Use manual handling techniques and operate manually-operated load shifting equipment when loading, unloading and handling explosives and dangerous goods

Select and use required personal protective equipment conforming to industry and OH&S standards
Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

**Critical aspects for assessment and evidence required to demonstrate competency in this unit**

The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of:

- identifying load characteristics, loading equipment and related practices
- identifying load label in accordance with identified classification and subsidiary risk information
- identifying markings/placards for vehicle in accordance with relevant regulatory requirements
- segregating, distributing and securing load for safe transport in accordance with regulations and current ADG/AE Code requirements
- safely loading and unloading explosives and dangerous goods in accordance with workplace procedures and current ADG/AE Code requirements

**Context of and specific resources for assessment**

Performance is demonstrated consistently over a period of time and in a suitable range of contexts

Resources for assessment include:

- a range of relevant exercises, case studies and other simulated practical and knowledge assessment, and/or
- access to an appropriate range of relevant operational situations in the workplace

In both real and simulated environments, access is required to:

- relevant and appropriate materials and/or
equipment, and/or
applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

Assessment of this unit must be undertaken by a registered training organisation
As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
Practical assessment must occur:
through appropriately simulated activities at the registered training organisation, and/or
in an appropriate range of situations in the workplace
Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Operations may be conducted: in a range of work environments and weather conditions
by day or night

Customers may be: internal or external

Workplaces may comprise: large, medium or small worksites

Work may be conducted in: limited and restricted spaces
exposed conditions
controlled or open environments
a workplace, warehouse or depot
in a vehicle on the road
at a client's workplace

Goods/cargo to be loaded and unloaded may require: special precautions for handling and stacking

Classes of dangerous goods and explosives are: as defined in the respective Australian codes

Standard placarding, marking and signage for identified explosives and dangerous goods are: as required in the respective Australian codes, including HAZCHEM Codes

Personnel in the work area may include: workplace personnel
site visitors
contractors
official representatives

Communication in the work area may include: phone
electronic data interchange
fax
email
internet
radio
oral, aural or signed communications

Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures

Loading operations may be carried out:

- manually
- with the aid of lifting equipment and/or appliances

Load restraint procedures and equipment are:

- as specified in mass and loading regulations and guidelines and current ADG Code/Australian Explosives Code as applicable

Personal protective equipment may include:

- gloves
- safety headwear and footwear
- safety glasses
- two-way radios
- high visibility clothing

Information/documents may include:

- goods identification numbers and codes, including current ADG Code and International Maritime Dangerous Goods (IMDG) markings and HAZCHEM signs
- relevant codes of practice, including the Australian Dangerous Goods Code, the Australian Explosives Code, the Industry Safety Code, and National Standards for Manual Handling
- manifests, bar codes, goods and container identification/serial number
- material safety data sheets
- manufacturers specifications for equipment/tools
- workplace procedures and policies for the loading and unloading of vehicles
- supplier and/or client instructions
- National Load Restraint Guide
- Australian Truck Drivers Manual
award, enterprise bargaining agreement, 
other industrial arrangements 
standards and certification requirements 
quality assurance procedures 
emergency procedures

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<tr>
<th>Applicable regulations and legislation may include:</th>
<th>Australian and state/territory mass and loading regulations</th>
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<tr>
<td></td>
<td>Australian and international regulations and codes of practice for the handling and transport of dangerous goods and hazardous substances, including:</td>
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<td>Australian and International Dangerous Goods Codes</td>
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<td></td>
<td>Australian Marine Orders and the International Maritime Dangerous Goods Code</td>
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<td></td>
<td>International Air Transport Association (IATA) Dangerous Goods by Air regulations</td>
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<td></td>
<td>Australian and International Explosives Codes</td>
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<td></td>
<td>Code of Practice for the Safe Transport of Radioactive Substances</td>
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<td></td>
<td>state/territory legislation covering the safe handling of infectious substances</td>
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<td>relevant state/territory environmental protection legislation</td>
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<td>workplace relations regulations</td>
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<td>equal opportunity legislation</td>
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<td>equal employment opportunity and affirmative action legislation</td>
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<td>relevant state/territory OH&amp;S legislation</td>
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**Unit Sector(s)**

Not applicable.
Competency Field

D - Load Handling