

Title	Demonstrate knowledge of the transfer of Class 1 Explosives		
Level	3	Credits	5

Purpose	<p>This unit standard is intended for people who control the transfer of Class 1 Explosives from one mode of transport to another. It covers the requirements of the Health and Safety at Work (Hazardous Substances) Regulations 2017.</p> <p>People credited with this unit standard are able to: describe legislation relating to the handling of Class 1 Explosives; demonstrate knowledge of United Nations Identification system for Class 1 Explosives, and the segregation of explosives and classification process of mixed loads; explain transfer zone requirements; demonstrate knowledge of documentation requirements for dangerous goods, and the initial response required for a dangerous goods emergency; and describe offences and penalties relating to Class 1 Explosives.</p>
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Classification	Commercial Road Transport > Goods Service
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Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations, references and/or industry standards relevant to this unit standard include but are not limited to the:
 - Hazardous Substances and New Organisms Act 1996 (HSNO Act);
 - Health and Safety at Work Act 2015 (HSW);
 - Health and Safety at Work (Hazardous Substances) Regulations 2017 (HSW (HS));
 - Land Transport Rule: Dangerous Goods 2005;
 - Land Transport (Offences and Penalties) Regulations 2005;
 - Hazardous Substances Professionals New Zealand (HSPNZ). (current edition). *Code of Practice for the Transport and Transfer of Explosives*. Available from: <https://www.hspnz.co.nz/>;
 - International Maritime Dangerous Goods Code (IMDG). Available from: <https://www.imo.org/en/>;
 - International Air Transport Association (IATA) Dangerous Goods Regulations (DGR). Available from: www.iata.org/;
 - NZS 5433:2020 Transport of Dangerous Goods on Land and associated handbook, HB 5433:2021 *New Zealand Handbook, UN Dangerous Goods List*. Available from: <https://www.standards.govt.nz/>;
 - SNZ HB 76:2010 Dangerous Goods Initial Emergency Response Guide. Available from: <https://www.standards.govt.nz/>;

- ANZ-ERG2021, *Australian and New Zealand Emergency Response Guide Book*. Available from: <https://www.responsiblecarenz.com/>;
- United Nations (UN). *Recommendations for Transport of Dangerous Goods (UNRTDG)*. Available from: <https://unece.org/>;
- Worksafe. (2017). Licensing Requirements for Class 1 Explosives. Available from: <https://www.worksafe.govt.nz/> (refer to *Controlled substance licenses*).

Any new, amended or replacement Acts, regulations, standards, codes of practice, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

Compatibility Group refers to the letter which follows the Hazards Division number in the Classification Code of an explosive. These are groups of explosives which can be stowed together without significantly increasing the probability of an accident or, for a given quantity, the magnitude of the effects of such an accident.

Controlled Substance Licence (CSL) is issued by Worksafe NZ and is required for possession of class 1 explosives, class 6.1A and 6.1B toxic agents or fumigants.

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) refers to an international standard which complements the United Nations numbered system of hazardous materials.

Hazard Division number refers to a numbered subdivision within the hazard classification code of an explosive.

PCBU refers to person conducting business or undertaking.

Transfer refers to the movement of explosives from one mode of transport to another where the movement requires handling of packages or containers. Explosives transfer operations most commonly conducted include but are not limited to loading and unloading of cargo vehicles, ships or aircraft. At any place where explosive transfer operations occur, the person in charge of the transfer must set up a Designated Transfer Zone (DTZ).

Workplace procedures refers to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the commercial road transport sector.

3 Assessment information

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

This unit standard is intended for people who will transfer Class 1 explosives. For training relating to the transportation of Class 1 Explosives by road, please refer to unit standard 33315, *Demonstrate knowledge of the transportation of Class 1 Explosives by road*.

Assessment material for this unit standard must be endorsed by the Hazardous Substances Professionals New Zealand (HSPNZ) Class 1 sub-group. Please contact tech@hspnz.co.nz for information about endorsement.

Outcomes and performance criteria

Outcome 1

Describe legislation relevant to handling of Class 1 Explosives.

Performance criteria

- 1.1 Basic principles and legal requirements of the Health and Safety at Work (Hazardous Substances) Regulations 2017 are described.
- 1.2 Basic principles of UN identification and classification of Class 1 Explosives are described in accordance to approved codes of practice.

Range IMDG, UNRTDG, IATA.

Outcome 2

Demonstrate knowledge of the United Nations Identification system for Class 1 Explosives.

Performance criteria

- 2.1 Class 1 Explosives are identified and explained in terms of hazard divisions, compatibility groups and classification codes.

Range includes but is not limited to – risk categories, Globally Harmonized System (GHS) classification and categories.

Outcome 3

Demonstrate knowledge of the segregation of explosives and classification process of mixed loads.

Performance criteria

- 3.1 Segregation of Class 1 Explosives from other goods are identified.
- 3.2 Division identification are determined for mixed loads of explosives for the purpose of transport.
- 3.3 Load segregation of Class 1 Explosive loads based on Compatibility Group are determined.

Outcome 4

Explain transfer zone requirements.

Performance criteria

- 4.1 Requirements for establishment of a transfer zone are explained.
- Range threshold limits, mixing rules, safety distances, transfer during hours of darkness, transfer zone exemptions, emergency management plans, thunderstorms, signage requirements, marking of freight containers.
- 4.2 Requirements for PCBU and trained handler are explained.
- Range zone management.
- 4.3 Requirements for transfer of UN 0161 Smokeless Powders are explained.

Outcome 5

Demonstrate knowledge of the documentation requirements for dangerous goods.

Performance criteria

- 5.1 Purpose of dangerous goods documentation is explained.
- 5.2 Key information about dangerous goods is identified and checked for accuracy.
- 5.3 Requirements of dangerous goods documentation are explained.
- Range dangerous goods declaration, emergency response information, load plan, container or vehicle packing certificate, additional information, communicate convoy procedures to drivers.

Outcome 6

Demonstrate knowledge of the initial response required for a dangerous goods emergency.

Performance criteria

- 6.1 Emergency response information is described.
- Range Australian and New Zealand Emergency Response Guide, SNZ HB 76 Dangerous Goods Initial Emergency Response Guide, Safety Data Sheets.
- 6.2 Initial actions that must be carried out in the event of an incident involving Class 1 Explosives are explained.

Outcome 7

Describe offences and penalties relating to the transfer of Class 1 Explosives.

Performance criteria

- 7.1 Offences and penalties listed in the HSNO Act 1996 and HSW(HS) Regulations 2017 are described.
- 7.2 Offences and penalties listed in the Land Transport (Offences and Penalties) Regulations 2005 are described.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 November 2023	N/A

Consent and Moderation Requirements (CMR) reference	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.