

Title	Describe and manage health, safety, and environmental requirements in roadmarking		
Level	4	Credits	8

Purpose	People credited with this unit standard are able to: describe health and safety management requirements for roadmarking operations, environmental management in the roadmarking industry, the management of hazardous substances used in roadmarking, safety management for hazardous events in roadmarking; and manage the use of hazardous substances used in roadmarking.
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Classification	Infrastructure Works > Roadmarking
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Available grade	Achieved
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Guidance Information

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant industry requirements.
- 2 Legislation and standards relevant to this unit standard include:
 - Hazardous Substances and New Organisms Act 1996;
 - Health and Safety at Work Act 2015;
 - Health and Safety at Work (Hazardous Substances) Regulations 2017;
 - Resource Management Act 1991;
 - Traffic Regulations 1976; available from www.legislation.govt.nz/;
 - Quality Standard TQS2, NZTA SP/M/023, available from www.nzta.govt.nz/resources/index.html;
 - SAA/SNZ HB 76:2010: Dangerous goods – Initial emergency response guide;
 - NZS 5433:2020 *Transport of dangerous goods on land*; available from www.standards.co.nz/;
 - and all subsequent amendments and replacements.
- 3 Definition

Industry requirements refer to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, scope of works, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents, Waka Kotahi New Zealand Transport Agency specifications and guidelines.

Outcomes and performance criteria

Outcome 1

Describe health and safety management requirements for roadmarking operations.

Performance criteria

- 1.1 Responsibilities of the person in control of a place of work for health and safety are described.
- Range accident reports, safety procedures.
- 1.2 Management of vehicles and resources is described in terms of safety features, appropriateness for task, emergency procedures, and safety data sheets (SDS).
- 1.3 Management and use of personal protective equipment is described in terms of appropriateness for task and for the materials and equipment being used in accordance with Health and Safety at Work legislation and regulations, and material supplier instructions.
- Range tasks may include but are not limited to – line removal, raised pavement marker (RPM) installation, applying roadmarking materials, roadwork; evidence of two tasks is required.
- 1.4 The management of hazards and incident identification and reporting is described in accordance with Health and Safety at Work Act 2015, regulations and codes of practice.
- 1.5 Management of hazardous substances used in roadmarking is described in accordance with Health and Safety at Work (Hazardous Substances) Regulations 2017 and material supplier instructions.
- Range a range of materials likely to be encountered in the course of roadmarking activities are to be described; SDS are to be referred to.

Outcome 2

Describe environmental management in the roadmarking industry.

Performance criteria

- 2.1 Roadmarking operations are described in terms of risks to the environment and requirements for their management.
- 2.2 Management of procedures for maintaining compliance with environmental resource consent conditions is described.
- Range spillages, noise, dust, watercourse protection.

- 2.3 Management of reporting for compliance with environmental resource consent conditions is described in accordance with legislation and regulations.

Outcome 3

Describe the management of hazardous substances used in roadmarking.

Performance criteria

- 3.1 Paints and thinners currently used for roadmarking are described in terms of their properties, processes, mixing ratios, and management requirements.
- 3.2 Flammable liquids and hazardous materials associated with use in roadmarking are described in terms of their properties and management requirements.
- Range fuel and other products currently used by the company.
- 3.3 Heated materials used in roadmarking are described in terms of their hazards and management requirements in accordance with material supplier instructions.
- Range thermoplastics, adhesives, liquid petroleum gas (LPG), heating oils.
- 3.4 Chemicals used in roadmarking are described in terms of their toxicity, safe handling, and management requirements in accordance with material supplier instructions.
- Range solvents, solvent-based (yellow) paints, etching acids.
- 3.5 Class 3 Hazchem labels are described in terms of contents and safety procedures.
- 3.6 Pressurised materials are described in terms of safe handling procedures and management requirements.
- Range materials include but are not limited to – paint, thinners, beads, hydraulics, LPG;
evidence of two materials is required.
procedures include but are not limited to – injection, skin contact.
- 3.7 Hazardous substances used in roadmarking are described in terms of the effect of climate, and management of the effect of climate.
- Range paint, thinners, flammable liquids, heated products, pressurised materials.

Outcome 4

Describe safety management for hazardous events in roadmarking.

Performance criteria

- 4.1 Management of spillage is described.
- 4.2 Management of events involving personal injury is described in accordance with the material supplier instructions and SDS.
- Range skin contact, injection of paint or solvent, inhalation, poisoning.
- 4.3 Management of fire or explosion events is described in accordance with material supplier instructions.
- 4.4 Management of events involving vehicle collision is described.

Outcome 5

Manage the use of hazardous substances used in roadmarking.

Performance criteria

- 5.1 Paints and thinners currently used by the company are managed in terms of their properties, mixing ratios, and processes in accordance with material supplier instructions.
- 5.2 Heated materials and heating fuel used by the company are managed in terms of their hazards in accordance with material supplier instructions.
- Range may include but is not limited to – thermoplastic, RPM adhesives, LPG, heating oils;
evidence of two hazards is required.
- 5.3 Chemicals used by the company are managed in terms of their toxicity and safe handling in accordance with material supplier instructions.
- Range solvents, solvent-based (yellow) paints, etching acids, ammonia.
- 5.4 Associated flammable liquids and hazardous materials used in roadmarking are identified and managed in terms of their properties.
- Range packaging and fuel currently used by the company.
- 5.5 Placarding requirements are managed in terms of handling, storage, and transport of hazardous substances legislation in accordance with NZS 5433:2020 *Transport of dangerous goods on land*.

- 5.6 Pressurised materials are identified and managed in terms of safe handling procedures in accordance with material supplier instructions and SDS.

Range materials may include but are not limited to – paint, thinners, beads, hydraulics, LPG;
procedures may include but are not limited to the avoidance of – injection, skin contact;
evidence of two materials and two procedures is required.

- 5.7 Hazardous substances used in roadmarking are managed in terms of the effect of climate.

Range paint, thinners, flammable liquids, heated products, pressurised materials.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 September 2005	31 December 2018
Review	2	20 April 2017	31 December 2023
Review	3	30 September 2021	N/A

Consent and Moderation Requirements (CMR) reference	0101
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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 Connexis - Infrastructure Industry Training Organisation qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.