

Title	Demonstrate knowledge of factors relating to the environment which influence an infrastructure worksite		
Level	2	Credits	8

Purpose	<p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – explain the principles, common control measures and risk assessment required to protect the environment on an infrastructure worksite; – demonstrate knowledge of environmental legislation relevant to an infrastructure worksite; – explain the types and purpose of resource consents and permits required for an infrastructure worksite; – explain the consequences of non-compliance, non-compliance reporting, and enforcement powers and notices relevant on an infrastructure worksite; – describe and communicate environmental incidents and the impacts on the employee working on an infrastructure worksite; – describe the types of contamination discharge, the impacts of a contamination discharge, and contamination mitigation measures on an infrastructure worksite; and – demonstrate knowledge of sediment control, maintenance schedules, and auditing and communication procedures of sediment control and maintenance schedules on an infrastructure worksite.
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Classification	Infrastructure Works > Generic Infrastructure Works
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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 legislative and industry requirements. Detailed knowledge of the legislation is not required rather how it applies to the infrastructure worksite.
- 2 Legislation relevant to this unit standard include:
 - Biosecurity Act 1993;
 - Conservation Act 1987;
 - Fisheries Act 1996;
 - Hazardous Substances and New Organisms Act 1996;
 - Health and Safety at Work Act 2015;
 - Heritage New Zealand Pouhere Taonga Act 2014;
 - Historic Places Act 1993;

- Land Transport Act 1998;
- Reserves Act 1977;
- Resource Management Act 1991 (RMA);
- and all subsequent amendments and replacements.

3 Definitions

Control measure refers to a method or procedure used to prevent, remedy, or mitigate environmental impacts.

Environmental aspect refers to any activity, product or service which has the potential to affect the environment.

Environmental impact refers to the actual problem or consequence which results from an environmental aspect.

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, 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.

Mana Whenua values refer to an understanding of Mauri and the practical application of mana whenua values in the appropriate context.

Risk assessment includes but is not limited to – identifying the likelihood that an environmental impact will occur and the magnitude of the problem if it does occur.

Outcomes and performance criteria

Outcome 1

Explain the principles, common control measures and risk assessment required to protect the environment on an infrastructure worksite.

Performance criteria

- 1.1 Principles of protecting the environment on an infrastructure worksite are explained in accordance with the RMA.

Range may include but is not limited to – the concept of sustainable development, environmental and social values, Mana Whenua values.

- 1.2 Potential negative environmental effects of construction activities and common control measures on the receiving environment on an infrastructure worksite are explained.

Range may include but is not limited to – potential adverse effects, on-site effects, off-site effects, physical damage, discharges to air, land and water, noise (including vibration); evidence of four negative environmental effects and their control measures are identified.

Outcome 2

Demonstrate knowledge of environmental legislation relevant to an infrastructure worksite.

Performance criteria

- 2.1 Purpose and principles of environmental legislation relevant to an infrastructure worksite are described.
- Range RMA, Conservation Act 1987, Historic Places Act 1993, Fisheries Act 1996, Land Transport Act 1998, Hazardous Substances and New Organism Act 1996, Biosecurity Act 1993, Reserves Act 1977.
- 2.2 Individual employee and employer responsibilities for compliance with environmental legislation on an infrastructure worksite are explained.
- Range RMA, Conservation Act 1987, Historic Places Act 1993, Fisheries Act 1996, Land Transport Act 1998, Hazardous Substances and New Organism Act 1996, Biosecurity Act 1993, Reserves Act 1977.
- 2.3 Administration authorities responsible for enforcement of the range of legislation relevant to an infrastructure worksite are explained.
- Range Consent Authorities, Department of Conservation, Ministry of Fisheries, Historic Places Trust, Fish and Game New Zealand.

Outcome 3

Explain the types and purpose of resource consents and permits required for an infrastructure worksite.

Performance criteria

- 3.1 Types and purpose of permits and consents required for an infrastructure worksite are explained.
- Range land use consent, subdivision consent, coastal permit, water permit, discharge permit, purpose, classes of activities, terms, conditions.

Outcome 4

Explain the consequences of non-compliance, non-compliance reporting, and enforcement powers and notices relevant on an infrastructure worksite.

Performance criteria

- 4.1 The consequences of non-compliance and non-compliance reporting relevant to an infrastructure worksite are explained.
- Range reputation of employer (environmental attributes and safety record), financial consequences, environmental risks, penalties for offences.

4.2 Enforcement powers and notices relevant on an infrastructure worksite are explained.

Range abatement notice, local authority enforcement officer issued directive, laying of information (administering authority takes prosecution), infringement notice, powers of enforcement agents.

Outcome 5

Describe and communicate environmental incidents and the impacts on the employee working on an infrastructure worksite.

Performance criteria

5.1 Environmental incidents on an infrastructure worksite and the impacts on the employee and the worksite are described.

Range evidence of three hazards.

5.2 Environmental incidents on an infrastructure worksite are communicated by the employee to fellow workers, employees' immediate supervisor on-site.

Outcome 6

Describe the types of contamination discharge, the impacts of a contamination discharge, and contamination mitigation measures on an infrastructure worksite.

Performance criteria

6.1 Types of discharge and potential contaminants on an infrastructure worksite are described.

Range types of discharge may include but is not limited to – discharge to air, discharge to water, discharge to land;
potential contaminants may include – dirt, milk, hot water, concrete, concrete cutting, fuel, fuel storage, hydraulic fluids, chemicals, chemical storage, asphalt and emulsion, atmospheric conditions, dust, odour/emissions, washing wastes, cesspits, storm water retention basins;
evidence of twelve types of discharge and/or potential contaminants required.

6.2 The impacts of discharging hazardous substances from an infrastructure worksite are described in accordance with the worksite environmental plan.

6.3 Contamination control and/or mitigation measures on an infrastructure worksite are described in accordance with the worksite environmental plan.

Range evidence of three contamination control and/or mitigation measures.

Outcome 7

Demonstrate knowledge of sediment control, maintenance schedules, and auditing and communication procedures of sediment control and maintenance schedules on an infrastructure worksite.

Performance criteria

7.1 Sediment control, maintenance schedule and auditing procedures are described in accordance with workplace practice.

Range may include but is not limited to – visual checks.

7.2 Sediment control and maintenance schedule are communicated to employees and immediate supervisor on an infrastructure worksite in accordance with workplace practice.

Range existing controls, damage avoidance, reinstatement.

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	17 June 2011	31 December 2023
Review	2	28 October 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.