

Title	Demonstrate knowledge of the environmental aspects of agrichemical use		
Level	4	Credits	8

Purpose	<p>This unit standard is for people involved with the handling, storage, supply, transfer, and/or manufacture of agrichemicals.</p> <p>People credited with this unit standard are able to explain: the application of the Resource Management Act 1991, and the HSNO Act 1996 for the use of agrichemicals; potential contamination of surface and groundwater by agrichemicals, and prevention measures; and the potential for damage by off-target spray drift by agrichemicals.</p>
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Classification	Agriculture > Agrichemical Supply
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Available grade	Achieved
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Guidance Information

1 Legislation and regulations relevant to this unit standard include but is not limited to:

- Hazardous Substances and New Organisms (HSNO) Act 1996;
- Health and Safety at Work Act 2015;
- Health Act 1956;
- Resource Management Act 1991;
- Drinking-Water Standards for New Zealand 2005 (Revised 2018).
- New Zealand Standard – Management of Agrichemicals NZS 8409:2004.

2 References

The New Zealand Standard applicable to this unit standard is NZS 8409:2004 *Management of Agrichemicals*, available from <http://www.standards.co.nz>.
Drinking-Water Standards for New Zealand 2005 (Revised 2018), available from <http://www.health.govt.nz>.

3 Definitions

Agrichemical – any substance, whether inorganic or organic, man-made or naturally occurring, modified or in its original state, that is used in any agriculture, horticulture or related activity, to eradicate, modify or control flora and fauna. It includes agricultural compounds, and for the purposes of agrichemical supply, includes fertilisers, vertebrate pest control products, and oral nutrition products.

Environmental Exposure Limits (EELs) – the maximum concentration of an ecotoxic substance in an environmental medium that will present a low risk of adverse effects to organisms in non-target areas. Concentrations are set according to the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2017.

Surface and groundwater sources – refer to streams, aquifers, bores, groundwater

flow, buffer zones.

Outcomes and performance criteria

Outcome 1

Explain the application of the Resource Management Act 1991, and the HSNO Act 1996 for the use of agrichemicals.

Performance criteria

1.1 Explain the Resource Management Act 1991 in terms of specific local requirements when using agrichemicals.

Range discharges to – air, land, water;
territorial local authorities, local regional management plans,
consultation and notification requirements.

1.2 Explain the Resource Management Act 1991, and the HSNO Act 1996 in terms of the practical handling requirements when using agrichemicals.

Range rinsing containers, disposal of concentrate and spray mix, tracking requirements, storage, contract disposal, land application, land use, run-off.

Outcome 2

Explain potential contamination of surface and groundwater by agrichemicals, and prevention measures.

Performance criteria

2.1 Explain the potential for surface and groundwater contamination by agrichemicals in accordance with legislative requirements.

Range legislation – Hazardous Substances and New Organisms Act 1996, Resource Management Act 1991; Health Act 1956, Drinking-Water Standards for New Zealand 2005 (Revised 2018); evidence of one contamination example for each legislation is required.

2.2 Explain the potential for surface and groundwater contamination by agrichemicals in accordance with EELs.

Range evidence of two potential contamination examples is required.

2.3 Explain prevention of surface and groundwater contamination by agrichemicals in accordance with NZS 8409:2004.

Range evidence of two contamination prevention examples is required.

Outcome 3

Control factors that contribute to off-target spray drift and take required precautions to prevent or minimise off-target spray drift.

Performance criteria

3.1 Control factors that contribute to damage caused by off-target spray drift of agrichemicals during spraying in accordance with NZS 8409:2004.

Range volatility, application methods, weather conditions, crop and soil capture, product formulation, calibration, product eco-toxicity, exposure, dose, off-target sensitivity including potential for property damage, contamination, drift reduction adjuvants.

3.2 Take required precautions to prevent or minimise off-target spray drift during spraying in accordance with NZS 8409:2004.

Range legal requirements including EELs, planning, consultation, notification, equipment, weather conditions.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 May 2005	31 December 2022
Rollover and Revision	2	22 August 2008	31 December 2022
Review	3	28 November 2019	N/A

Consent and Moderation Requirements (CMR) reference	0052
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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 Primary Industry Training Organisation standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.