

Title	Describe domestic wastewater treatment processes		
Level	4	Credits	8

Purpose	People credited with this unit standard are able to describe domestic wastewater treatment processes.
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Classification	Water Industry > Wastewater Treatment
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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 applicable legislative and industry requirements.
- 2 Legislation, regulations and industry standards relevant to this unit standard include but are not limited to the:
 - Resource Management Act 1991;
 - Building Act 2004 and relevant Building Codes;
 - Health Act 1956;
 - Historic Places Act 1993, and subsequent amendments;
 - regional and district plans;
 - regulatory authority requirements;
 - AS/NZS 1547:2012 *On-site domestic wastewater management*;
 - AS/NZS 1546.1:2008 *On-site domestic wastewater treatment units – Septic tanks*;
 - AS/NZS 1546.2:2008 *On-site domestic wastewater treatment units – Waterless composting toilets*;
 - AS/NZS 1546.3:2008 *On-site domestic wastewater treatment units – Aerated wastewater treatment systems*; available at <http://www.standards.co.nz>.
- 3 **Definition**
Industry requirements include manufacturers' specifications; and enterprise requirements which cover the documented workplace policies, procedures, specifications, business, and quality management requirements relevant to the workplace in which assessment is carried out.
- 4 It is recommended that the assessor uses design guidelines issued by the regional or local authorities in the candidate's locality.
- 5 Credit for this unit standard does not qualify the candidate to work in a drainlaying situation that comes under the drainlayer's licence requirements issued under the Plumbers, Gasfitters, and Drainlayers Act 2006 and any subsequent amendments.

Outcomes and performance criteria

Outcome 1

Describe domestic wastewater treatment processes.

Performance criteria

- 1.1 Primary treatment processes are described in terms of the operation of septic tanks and grease traps from inflow of raw wastewater to the discharge of treated wastewater.
- Range includes but is not limited to – types, features and operation of tanks and traps, factors affecting performance, risks and associated mitigation, installation.
- 1.2 Secondary treatment processes are described.
- Range includes but is not limited to – design, methods, operation and maintenance, factors affecting performance, risks and associated mitigation, suitability for situations, installation; evidence of three processes is required.
- 1.3 Disinfection treatment processes are described.
- Range includes but is not limited to – methods, components, operation and maintenance, factors affecting performance, risks and associated mitigation; evidence of three processes is required.
- 1.4 Nutrient reduction treatment processes are described.
- Range includes but is not limited to – methods, components, operation and maintenance, factors affecting performance, risks and associated mitigation; evidence of processes to reduce nitrogen and phosphorus is required.
- 1.5 Alternative treatment systems are described.
- Range includes but is not limited to – methods, benefits, design, operation and maintenance, conditions required for effective operation, factors affecting performance, risks and associated mitigation; evidence of three types of alternative treatment systems is required.
- 1.6 Soil treatment processes are described in terms of interactions between soil, plants and wastewater.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	17 October 2008	31 December 2018
Rollover and Revision	2	16 March 2017	31 December 2022
Review	3	23 July 2020	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.