

Title	Report on a wastewater treatment plant topic or improvement		
Level	5	Credits	10

Purpose	People credited with this unit standard are able to: describe a wastewater topic or operating problem; research the wastewater topic or operating problem using several methods; and report on potential solutions or improvements to the operating problem or topic.
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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. The report should be at least 3000 words (excluding graphics) and should be peer reviewed prior to submission for assessment.
- 2 Legislation relevant to this unit standard includes: Health and Safety at Work Act 2015, Water Services Act 2021, Hazardous Substances and New Organisms (HSNO) Act 1996, and subsequent amendments.
- 3 Definitions
Industry requirements include manufacturers' specifications; and enterprise requirements which may include documented workplace policies, procedures, specifications, business, and quality management requirements relevant to the workplace in which assessment is carried out.
Wastewater may include stormwater and sewage systems.
Wastewater treatment plant – a site where at least two unit process operations are used to improve wastewater quality for the purposes of reducing the pollution content of the wastewater before its return to the environment.
- 4 Learning and assessment activities for this unit standard must be informed by Te Mana o te Wai (refer to [Taumata Arowai](#)) and the *National Policy Statement for Freshwater Management 2020* from <https://environment.govt.nz/>.

Outcomes and performance criteria

Outcome 1

Describe a wastewater topic or operating problem.

Performance criteria

- 1.1 The wastewater topic or operating problem is described in terms of measured or perceived parameters.
- Range plant operating data, monitoring results, regulatory authority reports, customer complaints, financial budgets, safety.
- 1.2 The wastewater topic or operating problem is described in terms of data required and options for resolution.
- 1.3 The wastewater topic or operating problem is described in terms of history, health risks and environmental issues.

Outcome 2

Research the wastewater topic or operating problem using several methods.

Performance criteria

- 2.1 References are accessed and relevant information is gathered and summarised in terms of validity and relevance.
- Range examples of trade literature texts – association journals, manufacturer’s publications, texts; examples of internet sites – keyword searches, equipment suppliers, institution and consultant pages.
- 2.2 People at plants with similar problems or improvement opportunities are consulted and relevant information is gathered and summarised in terms of validity and relevance.
- Range plant visits, telephone, fax or email correspondence, conferences; evidence of two consultations is required.

Outcome 3

Report on potential solutions or improvements to the operating problem or topic.

Performance criteria

- 3.1 The executive summary of the report is consistent with the potential solutions, or improvements to the operating problems.
- 3.2 Material gathered from each form of research is collated, analysed, and summarised consistent with potential options, and proposed solutions or improvements.
- 3.3 The body of the report identifies and compares options for remedying the problem or perspectives of the topic in terms of cost and effectiveness.
- Range may include but is not limited to – tables, graphs, text, diagrams.

3.4 The report is produced in the required format.

Range format – numbering system, indentations, figures and tables, type style and size.

3.5 The language of the report is appropriate for the specified audience.

Range tone, register, vocabulary, grammar, syntax.

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	19 April 2002	31 December 2018
Review	2	19 September 2008	31 December 2018
Review	3	16 March 2017	31 December 2023
Review	4	28 April 2022	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 Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihanga.nz if you wish to suggest changes to the content of this unit standard.