

Title	Undertake sampling and water quality monitoring for a small drinking-water system		
Level	3	Credits	7

Purpose	People credited with this unit standard are able to undertake sampling and water quality monitoring for a small drinking-water system.
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Classification	Water Industry > Water Treatment
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Available grade	Achieved
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Guidance Information

- 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.
- Legislation and references relevant to this unit standard include: Health and Safety at Work Act 2015, Water Services Act 2021, Hazardous Substances and New Organisms Act 1996, Health and Safety at Work (Hazardous Substances) Regulations 2017, and subsequent amendments; *Drinking-Water Standards for New Zealand, 2005 (Revised 2018)*, and subsequent replacements, available at www.taumataarowai.govt.nz.
- 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.
Small drinking-water system refers to a drinking-water supply servicing from 50 to 500 people; and which includes catchment, source, treatment, and distribution.
- Learning and assessment activities for this unit standard must be informed by *Te Mana o te Wai* (refer to [Taumata Arowai](http://www.taumataarowai.govt.nz)) and the *National Policy Statement for Freshwater Management 2020* available from <https://environment.govt.nz/>.
- Some Marae are using traditional Māori indicators to determine water quality, for example, amount of algae and weed growth, presence of algae on rock, flow rate, and smell.

Outcomes and performance criteria

Outcome 1

Undertake sampling and water quality monitoring for a small drinking-water system.

Performance criteria

- 1.1 Sampling sites and times are selected.
- Range sampling frequency, grab samples, containers, multiple sites.
- 1.2 Sample collection is carried out.
- Range includes but is not limited to – correct containers, sterility, flush volumes, representative samples, sample contamination prevention, preservation of sample integrity.
- 1.3 Samples are labelled.
- Range includes but is not limited to – date, time, location, source, purpose, sampler.
- 1.4 Samples are handled and transported.
- Range may include but is not limited to – sample packing, temperature control, sunlight effects, timeliness.
- 1.5 Monitoring is carried out.
- Range may include but is not limited to – tank levels, flow, alarms response, pressure, chlorine level, catchment activity, any required site testing.
- 1.6 Results of sampling and monitoring are compared with target levels and action is taken.
- Range immediate action, emerging trends.
- 1.7 Records of sampling and monitoring results are maintained and stored.
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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	16 March 2017	31 December 2024
Review	2	24 February 2022	N/A

Consent and Moderation Requirements (CMR) reference

0101

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihanga.nz if you wish to suggest changes to the content of this unit standard.