

<b>Title</b>	<b>Undertake sampling and site analysis for water treatment</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	People credited with this unit standard are able to: collect and handle water samples for water treatment; and carry out site analysis of water in a drinking-water or wastewater treatment plant.
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<b>Classification</b>	Water Industry > Water Treatment
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<b>Available grade</b>	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. For the assessment of Performance Criterion 2.1, candidates will be assessed against the range appropriate to their workplace.
- Legislation relevant to this unit standard includes the 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.
- Definition  
*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.
- 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* available at <https://environment.govt.nz/>.

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### Outcomes and performance criteria

#### Outcome 1

Collect and handle water samples for water treatment.

#### Performance criteria

- 1.1 Sampling sites and times are selected.

Range            sampling frequency, sampling methods, containers, multiple sites.

1.2 Sample collection is carried out.

Range includes but is not limited to – sampling methods, correct containers, sterility, flush volumes, representative samples, sample contamination, 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, chain of custody.

## Outcome 2

Carry out site analysis of water in a drinking-water or wastewater treatment plant.

### Performance criteria

2.1 Testing equipment is calibrated, if required, and site tests are carried out.

Range drinking-water – chlorine residual, plus any two of – turbidity, temperature, conductivity, pH, alkalinity, hardness; wastewater – pH, dissolved oxygen, settleability, sludge blanket; evidence of two is required.

2.2 Results of site testing are recorded.

Range at least one of – plant log, computer-based data systems.

2.3 Sample results that are outside operating guidelines result in action.

<b>Planned review date</b>	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	1 February 2001	31 December 2018
Review	2	19 September 2008	31 December 2018
Review	3	16 March 2017	31 December 2024
Review	4	24 February 2022	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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### Comments on this unit standard

Please contact Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@waihanga.nz](mailto:qualifications@waihanga.nz) if you wish to suggest changes to the content of this unit standard.