

41239**Carry out sampling, testing, and reporting of drinking water**

Kaupae Level	3
Whiwhinga Credit	5
Whāinga Purpose	This skill standard is for people working in an environment that requires the sampling and testing of drinking water. People with this skill standard can carry out compliant drinking water sampling, testing, result interpretation, and reporting to verify compliance, and inform operational decision-making. This skill standard aligns with the New Zealand Certificate in Drinking Water Treatment Operations (Level 4) with optional strands in Pre-Treatment, Clarification, Coagulation and Flocculation, Non-Chlorine Disinfection, Fluoridation, and Filtration [Ref: 5672] and may also contribute to other water services industry credentials.

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Apply regulatory and compliance requirements to drinking water sampling and testing.	a. Identify legislative, and regulatory requirements applicable to drinking water sampling and testing.
	b. Explain how drinking water sampling and testing protect public health and verify drinking water safety.
	c. Apply drinking water safety plans, sampling schedules, and standard operating procedures when planning sampling activities.
	d. Apply notification, escalation, and incident response requirements to drinking water results that do not meet specified limits.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Perform drinking water sampling and testing to inform operational decision-making.	a. Select sampling locations, times, and methods that verify treatment performance.
	b. Collect drinking water samples using specified methods while maintaining sample integrity, hygiene, and contamination-prevention controls.
	c. Interpret sampling results to determine compliance, treatment effectiveness, and potential public health risk.
	d. Record and report results in accordance with drinking water regulatory, operational, and incident management procedures.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

Ākonga must demonstrate that they can carry out compliant sampling, testing, and reporting of drinking water in a manner that meets current operational and applicable legislative and regulatory requirements.

Safety, health, and environmental risk control must meet operational and regulatory requirements and be demonstrated as an embedded component of performance, not assessed in isolation.

Definitions

Operational requirements refer to the documented and embedded ways of working that govern how activities are planned, performed, monitored, and controlled in the workplace to ensure safe, consistent, and compliant operations.

Water services refer to industries responsible for working on or around water supplies, networks, plants, and systems.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content**Sampling purpose and controls**

- Why sample e.g. compliance sampling, process sampling, compound including microbiological, organic and inorganic sampling.
- What to look for.
- Chain of custody.
- Implications and consequences – community safety, protecting natural ecosystems.
- Compliance frameworks including Drinking Water Safety Plans and Drinking Water Quality Assurance Rules.
- Escalation e.g. process for samples that are out of range.
- Verification.
- Standard operating procedures.

Health and safety

- Hygiene.
- Personal Protective Equipment.
- Sterilisation.

Equipment

- Equipment such as measuring probes, e.g. pH, temperature, photometers and associated chemical reagents, flow meters.
- Adjustment and verification.

Sampling and testing

- Representative sample and process sampling, e.g. real events, reaction to changes.
- Compliance sampling e.g. chlorine residual, pH, taste, colour, turbidity (aesthetics).
- Taking a sample (e.g. online, grab, composite), what to put your sample in, and avoiding contamination.
- Storing and transporting samples.
- Records and reporting.

Rauemi | Resources

Legislation, regulations and/or industry standards relevant to this skill standard include, but are not limited to:

- Drinking Water Quality Assurance Rules - [Drinking Water Quality Assurance Rules](#).
- Drinking Water Standards for New Zealand - [Water Services \(Drinking Water Standards for New Zealand\) Regulations 2022 \(SL 2022/168\) – New Zealand Legislation](#).
- Health and Safety at Work (Hazardous Substances) Regulations 2017 - [Health and Safety at Work \(Hazardous Substances\) Regulations 2017 \(LI 2017/131\) \(as at 20 October 2025\) Contents – New Zealand Legislation](#).

- Resource Management Act 1991 - [Acts and Bills | Ministry for the Environment](#).
- Water Services Act 2021 - Section 69-70 - [Water Services Act 2021, Public Act Contents – New Zealand Legislation](#).

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Energy and Infrastructure Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Engineering and Technology > Water Industry > Water Treatment
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 May 2026	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 17891.		
Rā arotake Planned review date	31 December 2032		

Please contact Energy and Infrastructure Industry Skills Board at qualifications@energyinfra-skills.nz if you wish to suggest changes to the content of this skill standard.