



# Demonstrating safe and potable water

Prior to taking water from the ground or a surface water like a lake, stream or spring:

- Complete a chemical suite of the raw water that reflects surrounding land use and geographical location and provide it to council.
  - In general a new source doesn't need to be tested for every maximum acceptable value. An accredited lab (mentioned below) should be able to advise an appropriate suite e.g. normal chemistry plus metals for geothermal area plus chemicals for orchard areas.
- When water contains any chemical at greater than 50 percent of its maximum acceptable value, the responsible person shall monitor the chemical at least annually until they find its concentration to be less than 50 percent of its maximum acceptable value in three consecutive samples, and attempt to identify a reason for the drop in concentration.
- Microbiologically treat the water such as with cartridge filtration and a UV disinfection unit (these systems include a function that will indicate when the unit is not working properly) as per Drinking-water Standards for New Zealand 2005 (revised 2018) Table 10.1 Notes 3 and 5.
- Identify activities on site that could be a backflow risk and take appropriate measures to remove this risk.
- Have sufficient storage for 2-3 days (if there is no guaranteed alternative safe water supply available).
- Have in place response procedures when a maximum acceptable value is exceeded or treatment failure is detected.
  - These procedures must define actions required to be taken when a maximum acceptable value is exceeded, and must contain, but are not limited to, the following elements.
    - When E. coli is detected in a sample the consent holder must immediately take action to discover the reason and minimise the likelihood of a recurrence (see Figure 4.2 of the Ministry of Health, Drinking-water Standards for New Zealand 2005 (revised 2018)).
    - When a treatment process fails to perform within its operational requirements, the responsible person must issue a 'boil water' notice or use an alternative water source until adequate treatment systems are restored.
    - Conduct a sanitary inspection of the water supply.
    - If the responsible person issues a permanent 'boil water' notice, it must display signage next to all taps connected to the supply.



# TOI TE ORA PUBLIC HEALTH

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On an ongoing basis:

- Water used for potable purposes must meet the water quality standards (that is, the maximum acceptable values) of the Ministry of Health, Drinking-water Standards for New Zealand 2005 (revised 2018) or any subsequent standards or revised standards.
- Maintain and operate the treatment system to manufacturer specification.
- Monitor the treatment system effectiveness and have systems in place that prevents partially treated or untreated water to be used for potable use.
- Monitor the microbiological quality of the treated water for E. coli representing the water that will be consumed.
  - The frequency of this sampling should relate to the number of people supplied by the bore water and be:
    - monthly for a population of 500 or less, or;
    - weekly for a population more 500
  - take samples at the point of consumption; ie a kitchen tap.
- Repeat every 5 years, a chemical suite of the bore water deemed appropriate (see above) for the surrounding land use and provide it to council.
- Only a laboratory recognised by the Ministry of Health as competent to carry out the drinking-water compliance testing must carry out analyses. A register of laboratories can be viewed on the Institute of Environmental Science and Research Limited (ESR) website [Register of Recognised Laboratories](#).
- Maintain any on site water storage tanks in a condition that prevents the ingress of contamination.
- Implement immediately the response procedures when a maximum acceptable value is exceeded or treatment failure is detected including notification to the territorial authority.