

## Summary of the proposed Drinking Water Quality Assurance Rules

The Drinking Water Quality Assurance Rules (the Rules) tell drinking water suppliers what they need to do to comply with the Drinking Water Standards (the Standards).

The Rules outline minimum requirements for monitoring, reporting and other activities that assure the safety of drinking water.

### Key changes from the old Drinking -water Standards for New Zealand (DWSNZ Revision 2018)

The new Rules apply to all drinking water supplies that serve more than a single domestic dwelling. This reflects the increased scope of the Water Services Act 2021 (the Act).

The Rules have been separated out from the Standards and are presented in a separate document. Key changes from the DWSNZ Revision 2018 include:

- different levels of complexity to cater to the diversity of drinking water supplies
- a new format to make it easier for suppliers to find the rules that apply to their supplies
- a greater emphasis on testing to identify and help manage risks
- new requirements for source water testing and distribution system monitoring
- a new requirement to include a Source Water Risk Management Plan as a component of a Drinking Water Safety Plan
- discontinued the DWSNZ Revision 2018 secure bore water criteria. All water supplies will need some form of treatment unless an exemption is granted by Taumata Arowai
- a new chemical compliance section for large (>500 people) supplies.

### Increased emphasis on identifying and managing risks

All suppliers (except those using an Acceptable Solution) need to provide a Drinking Water Safety Plan outlining how they will meet the requirements laid out in the Rules. They also need to perform a thorough assessment of the risks across their whole drinking water supply system from the source to the tap. This risk assessment may identify other contaminants not covered by the Rules or the Standards. Suppliers need to provide details on how they will monitor and manage these risks in their Drinking Water Safety Plan.

### We've developed the Rules to meet the diverse needs of suppliers

There are many different drinking water supplies across New Zealand. Some serve multiple cities while others serve single rural schools. Some deliver water to taps in their customers' homes and others deliver water in tanker trucks. Some use water from lakes or rivers. Others use rainwater or groundwater. We've developed the Rules to provide for this diversity.

We have developed specific rules for each of the following supply types:

- **On-demand Networked Drinking Water Supplies** – Water supplies that provide water via a piped network at a pressure and volume to meet consumer demand:
  - Very Small Supplies (<50 people)
  - Small Supplies (50 – 500 people)
  - Large Supplies (>500 people)
  - Varying Population Size – for those populations that vary significantly between base population and peak population, perhaps due to a high number of holiday homes which are usually only occupied in the summer.
- **Trickle Feed Water Supplies** – water supplies which provide water at an agreed allocation (trickle feed) to a storage tank at a consumers’ property. Typically, these supplies provide domestic or stock water in rural areas with an agreed quantity over a 24-hour period.
- **Self-supplied Building Drinking Water Supplies** – water supplies which provide water to a single building. For example, an apartment building or a cafe. This category does not include single domestic dwellings.
- **Water Carrier Services** – drinking water that is supplied from a vehicle with a water tank (e.g. a truck, trailer, or rail wagon), often to a storage tank on a property.
- **Planned Event Temporary Drinking Water Supplies** – where a drinking water supply is required for the duration of an event that lasts less than 60 days. This category includes music festivals, farm field days, civil defence and military exercises.
- **Community Drinking Water Stations/Water Carrier Supplies** – these supplies provide drinking water from a single site to a community who collect the water in containers. Water Carrier Supplies are owned and operated by water carriers who use them to fill their tanker vehicles with drinking water.

## Rules are grouped into modules to make it easier for suppliers

Rather than reading through extensive chapters, each drinking water supplier is assigned a small set of modules containing the rules that apply to them.

There are general rules (G) that all suppliers need to follow.

There are rules that apply to different sizes or complexity of supply:

- 1 = simple
- 2 = moderate
- 3 = complex

There are rules that apply to different parts of the system:

- Source water (S) rules relate to the process of extracting water.
- Treatment (T) system rules relate to the process of treating water
- Distribution (D) system rules relate to the networks and pipes used to distribute water to consumers.

There are rules that apply to water carrier (WC) services and planned temporary events (PTE).

The complexity of the rules increases with the size of the supply. The aim is to reduce the burden on smaller suppliers while effectively managing the risks.

The modules are laid out in the following table.

<b>G</b> General Rules		
<b>S 1</b> Source Water – Simple	<b>T 1</b> Treatment Systems - Simple	<b>D 1</b> Distribution Systems - Simple
<b>S 2</b> Source Water – Moderate	<b>T 2</b> Treatment Systems - Moderate	<b>D 2</b> Distribution Systems – Moderate
<b>S 3</b> Source Water - Complex	<b>T 3</b> Treatment Systems – Complex	<b>D 3</b> Distribution Systems - Complex
<b>WC</b> Water Carrier Services	<b>PTE</b> Planned Temporary Event	

Each supplier is assigned a selection of modules. For example, a small water project supplying water on demand to a community of 100 people will be required to comply with the following modules:

**G + S2 + T2 + D2**

Within each module there are two types of rules:

- **Monitoring and reporting rules** ensure that water supplies are complying with the Drinking Water Standards. There are different monitoring periods depending on the supply, varying from continuous monitoring and daily monitoring up to annual monitoring.
- **Assurance rules** outline actions that a water supplier needs to undertake to ensure the safety of water. For example, the preparation of a backflow prevention programme to stop contaminated water re-entering the network.

Drinking water suppliers must collect and report data and maintain records to demonstrate compliance with the monitoring and assurance rules.

## Key changes to the Rules

Key requirements in the Rules, which have changed from the DWSNZ (Revised 2018) include:

### Source water (S)

- i. All source waters must be monitored for a range of parameters.
- ii. Source waters for Level 3 (complex) supplies are classified into four categories to determine the level of protozoa treatment that is required.
- iii. There are more specific requirements to prevent surface water entering bore heads.

### Treatment (T) systems

- i. We have updated the list of treatment system types, removing those that are not applicable to current industry practice.
- ii. Chemical compliance Rules for complex drinking water supplies (T3) are now assigned to supplies based on the statistical 'Typical Value Method'. These values are used to determine monitoring periods for different chemical determinands in the source water.
- iii. We have added requirements for event-based monitoring to manage the risk to public health from rapid changes to the concentrations of contaminants in a water source or treatment plant.
- iv. We have added new cyanotoxin compliance rules based on risk categories of the source water.

### Distribution (D) systems

- i. There are more rules for distribution systems, especially specific backflow prevention rules.
- ii. Residual disinfection will be compulsory unless an exemption is approved by Taumata Arowai, or a relevant Acceptable Solution is implemented.

### Other

- Drinking water suppliers must submit monitoring reports and data to Taumata Arowai in accordance with the monitoring period frequency requirements set out in the General (G) Rules.
- Tankered water supplies have been added back into the Rules as 'Water Carrier Services'.
- We have added and assigned rules to Planned Temporary Event, Trickle Feed, Self-supplied Building, Community Drinking Water Station and Water Carrier water supplies.
- On-Demand Networked water supplies have been recategorized into four new population brackets:
  - Very Small Supplies (<50 people)
  - Small Supplies (50 – 500 people)
  - Large Supplies (>500 people)
  - Varying Population Size.