

# Water Services Act 2021 (Exemption No. 002, Rakaia Huts) Residual Disinfection Exemption 2024

This exemption is granted pursuant to section 58 of the Water Services Act 2021 (“Act”), by the Head of Regulatory of Taumata Arowai acting under delegated authority.

## 1. Commencement

The exemption comes into force on 1 February 2024.

## 2. Exemption

**Selwyn District Council** is exempted under section 58 of the Act from the requirement to use residual disinfection in the Rakaia Huts drinking water supply (RAK003).

The exemption is subject to the following conditions, which Selwyn District Council must comply with:

- (1) A programme detailing the installation of smart meters to all residential connections by 31 December 2024, including the type and functionality of the meters, how data from the meters will be collected, managed and analysed and how mass balance calculations of water use and loss will be undertaken, must be provided to Taumata Arowai by 1 September 2024.
- (2) Smart meters must be installed according to the programme set out in condition 1, subject to any variations to that programme agreed to by Taumata Arowai.
- (3) Maximum life spans for the smart meters and associated check valves must be identified and documented, and a programme to replace them within those maximum life spans provided to Taumata Arowai, by 31 December 2026.
- (4) Before the supply begins to operate without residual disinfection, Selwyn District Council must demonstrate to the reasonable satisfaction of Taumata Arowai that the risk of contamination of drinking water due to ingress into infrastructure contained in below ground chambers at the treatment plant is appropriately managed.
- (5) Analysis for water quality indicators and operational parameters must be carried out in accordance with the monitoring and sampling plan for the Rakaia Huts drinking water supply, as set out in Appendix B of the Selwyn District Council Drinking Water Quality Compliance Monitoring Plan (Revision 7 dated 8/1/2024), or in accordance with any changes to that plan agreed to by Taumata Arowai.
- (6) Before the supply begins to operate without residual disinfection, monitoring frequencies and response protocols for heterotrophic plate counts must be set, to the reasonable satisfaction of Taumata Arowai. Frequency settings should help to detect both contaminant ingress and conditions conducive to opportunistic pathogen proliferation.

- (7) The supply must be operated in accordance with the version of the Drinking Water Safety Plan that is current at any given time.
- (8) The supply must be operated in accordance with the G, S2, T3 and D2 rules in the Drinking Water Quality Assurance Rules, with the following modifications:
  - (i) Rules relating residual disinfection do not apply. For the avoidance of doubt, Rules G16 and D2.5 do not apply, and Rule D2.4 should be read with references to FAC excluded.
  - (ii) The reference to a reduction equivalent dose (RED) of 40 MJ/cm<sup>2</sup> in rules T3.16 and T3.17 is replaced by a RED of 187 MJ/cm<sup>2</sup>.
- (9) The supply chlorination system must be tested at least annually, with the supply chlorinated to a minimum level of free available chlorine of 0.5mg/L in water leaving the treatment plant and 0.2mg/L in the distribution system for a period of at least 24 hours.
- (10) Selwyn District Council must retain full editorial rights and ownership of the Drinking Water Safety Plan, the Unit Process Control Procedure and all associated supporting documents and procedures, with no dependency on contracted or consulting third parties to maintain and update those documents. For the avoidance of doubt, this condition does not prevent Selwyn District Council from engaging contractors or consultants to carry out work on these documents; the intent is to ensure that Selwyn District Council retains ultimate responsibility for, and the ability to adjust, the versions of these documents are current at any given time.
- (11) Taumata Arowai must be promptly informed of:
  - (i) any new or altered circumstances that may change the hazards or risks affecting the supply;
  - (ii) any material change to, or revision of, the supply's Drinking Water Safety Plan, Water Supply Scheme Unit Process Control Procedure, or Drinking Water Quality Compliance Monitoring Plan; and
  - (iii) any new issues emerging that materially change the assessment of the supply, including in relation to Te Mana o te Wai.

### 3. Reasons for granting the exemption

The exemption has been granted for the following reasons:

- (a) Having regard to the scale, complexity and risk profile of the Rakaia Huts drinking water supply and subject to the conditions above, the supply can be operated without residual disinfection in a way that is consistent with the main purpose of the Act.
- (b) Aside from residual disinfection, there are grounds to be satisfied that the drinking water supplied by the Rakaia Huts drinking water supply will comply with all other legislative requirements on an ongoing basis.
- (c) There are grounds to be satisfied that drinking water supplied by the Rakaia Huts drinking water supply will comply with the Drinking Water Safety Plan on an ongoing basis.

#### 4. Term

This exemption expires on the close of the day that is 5 years after the date on which it takes effect, unless it is sooner replaced or revoked.

#### 5. Administering agency

The administering agency for this exemption is Taumata Arowai—the Water Services Regulator.

Dated at Wellington this 31<sup>st</sup> day of JANUARY 2024



Steve Taylor  
Head of Regulatory  
Taumata Arowai