

Exemption Decision Paper

Exemption Number	EXE-00001024
Exemption Type	General Exemption
Supply Name	Torrent Bay
Supply ID	TOR002
Date	19 December 2023
Applicant	Torrent Bay Township Committee
Exemption Team	Jim Graham, Principal Advisor, Drinking Water India Eiloart, Senior Technical Advisor
International panel member	N/A

Recommendation

For the reasons set out in this paper, the Exemption Team recommends that you:

- (a) **approve** the general exemption application for the Torrent Bay drinking water supply, and
- (b) grant the exemption **subject to the following conditions:**

Torrent Bay Township Committee must ensure:

- all private residences that receive drinking water from the Torrent Bay drinking water supply either have end-point treatment consisting of cartridge filtration and UV disinfection, or arrangements making occupiers aware of the need to boil water before it is consumed;
- adequate signage advising consumers to boil water before drinking is installed and maintained in a visually prominent places at the taps at the Torrent Bay Village Campsite, the Torrent Bay public toilet, and the taps at the Torrent Bay Jetty.
- adequate signage advising consumers to boil water before drinking is installed and maintained in a visually prominent place if any new public taps are installed; and
- Taumata Arowai is promptly informed of any new or altered circumstances that may change the hazards or risks affecting the supply.

Executive summary

1. On 26 June 2023, the Torrent Bay Township Committee (**TBTC**) applied for a general exemption in relation to the Torrent Bay drinking water supply (supply ID TOR 002). The application was made under section 57 of the Water Services Act 2021 (**WSA**).

2. The Exemption Team considers that it would be impracticable and disproportionate to the risks involved to operate the supply in a way that meets all the requirements of the WSA due to:
 - a. the remote location of the community
 - b. the lack of a continuous reliable electricity supply to the community, and
 - c. the small population and lack of any permanent residents at the community.
3. The Exemption Team recommends that a general exemption be approved for the supply with conditions that require:
 - TBTC to ensure that private residences either have end-point treatment (cartridge filtration and UV disinfection) or arrangements making occupiers aware of the need to boil drinking water, and
 - installation and maintenance of signage at taps at the Torrent Bay Village Campsite, the Torrent Bay public toilet, and taps on the Torrent Bay Jetty advising of the need to boil all drinking water.
4. The Torrent Bay supply is located in a remote community in the Abel Tasman National Park. It provides water to 53 private residences, a Tasman District Council (**TDC**)/Department of Conservation (**DoC**) campsite and taps on the Torrent Bay Jetty. It is only accessible by boat or a 3-hour bush walk from the nearest roadend at Marahau.
5. The reason that a general exemption application has been sought for the Torrent Bay water supply is that TBTC considers meeting the relevant requirements of the WSA is impracticable.

Supply information

6. Torrent Bay is located approximately 30km north of Motueka in the Tasman District but has no road access. The Torrent Bay Water Scheme has provided water for the dwellings in Torrent Bay since 1927. TBTC currently operates the supply on behalf of the residents. The supply was registered with the Ministry of Health under the Health Act 1956 in 1995 and is now registered under the WSA.
7. TBTC is an unincorporated body. It is listed on the TDC website as a community association. An unincorporated body is a person for the purposes of the WSA's 'drinking water supplier' definition and is able to be granted an exemption. TBTC is registered with Taumata Arowai as the supply owner and an individual member's details have been provided as the overall supply contact.
8. The land of Torrent Bay was under private ownership before it was transferred to the Crown as part of the Abel Tasman National Park. When that occurred, a parcel of land (approx. 21ha) was gifted to TDC as part of the Torrent Bay Waterworks Reserve. It remains as a waterworks reserve today. While TDC owns the reserve, the TBTC owns and operates the water supply.
9. The catchment is entirely native bush with access above the intake extremely limited. Feral animal control is undertaken on behalf of the residents (by the Bird Song Trust and Project

Janszoon) and by DoC. The Abel Tasman Coast Track runs through the village and at low tide a short cut can be taken across the estuary from the jetty and campground. Most people arriving this way walk along the beach and meet up with the track at the end of the community.

10. There are 53 privately owned properties at Torrent Bay, along with a campsite (owned by TDC but managed by DoC) and a public toilet supplied with water from the supply. All of the privately owned dwellings are holiday homes and there are no permanent residents at Torrent Bay.
11. The water source is an unnamed stream at the northern end of the bay, within the Torrent Bay Waterworks catchment. A resource consent is in place for the take and use of water (RM150192), which expires in May 2033.
12. The scheme intake is located approximately 67m above the community and has a stainless steel screen filter located in the stream bed. This feeds a 2000L tank which acts as a sand trap. Following this the water then passes through 2 x 7500L and a single 15000L tank in series to allow for some sedimentation. A rough filter is to be included into the system to further reduce sediment. Any overflow is directed back into the stream. After the tanks, the water goes through a water meter and then splits into 50mm and 90mm parallel pipes.
13. These parallel pipes are intended to allow for redundancy if one is damaged. They discharge into a 100mm PVC main which flows around the community and provides water to the residents and 10 fire hydrants. In addition, water is supplied to a tap at the TDC/DoC campsite, TDC public toilet and 2 taps at the Torrent Bay jetty. All public taps are marked as non-potable.
14. It is intended that each property will eventually have its end-point treatment consisting of a 20 micron and 1 micron dual cartridge filter and UV disinfection with maintenance, monitoring and incident response plans to be developed.

Information provided by the applicant

15. TBTC's exemption application form was accompanied by a more detailed application document which provides:
 - a description of the supply including photographs
 - an explanation of the reason the application has been made
 - an explanation of how risks to public health will be managed
 - other compliance options or pathways that have been considered
 - an explanation of how granting an exemption will be consistent with the main purpose of the Act, and
 - how granting the exemption will give effect to Te Mana o te Wai.
16. All the information provided is considered relevant and has been taken into account by the Exemptions Team.

Practical considerations

17. The water supply at Torrent Bay has some particular characteristics which must be taken into account when assessing the application. They include:
- There are no permanent residents in the Torrent Bay community and at times many weeks go by when there is no one there at all.
 - There is no centralised grid power supply in Torrent Bay.
 - There is no road access to Torrent Bay, it is only accessible by boat or a 3-hour walk from the nearest roadend at Marahau.
 - TBTC manages the current water supply but any significant decisions such as installing centralised treatment must include the approval of all residents which would be difficult to achieve.
 - The proposed approach is that each property will be responsible for maintaining and operating its own filtration and UV end user system or boiling their drinking water which reflects the approach used in the current Acceptable Solutions issued by Taumata Arowai.
 - The remote nature of the community makes testing the microbiological quality of the water difficult, including the Drinking Water Quality Assurance Rules (**DWQAR**) Very Small Community requirement for two *E. coli* samples annually. Additionally, as the water provided to the community is untreated, positive results for *E. coli* would be expected and hence provide little useful information.
 - The community and supply are small and remote, so the relevant legislative requirements are considered disproportionate to the scale, complexity and risk profile of the supply.

Available compliance pathways

18. TBTC has considered using elements of the acceptable solutions that Taumata Arowai has prepared and considers the approach of using cartridge filtration and UV disinfection appropriate for their circumstances. However, the supply uses a surface water source for which an acceptable solution has not been prepared and the supply does not meet the eligibility criteria for the other acceptable solutions.
19. Alternatively, the supply could demonstrate compliance with the DWQAR. The population for the supply is listed in Hinekōrako as 20 people. If this population is correct the supply would meet the definition of a Very Small Community, which is:
- Drinking water supplies of any configuration or arrangement (excluding domestic self-supplies) that provide drinking water to a population of up to 25 people. In circumstances when the population supplied fluctuates, the population supplied may increase to up to 50 people for up to 60 days in any 12-month period.*
20. If the supply was to meet this definition, compliance could be demonstrated against the Very Small Communities Rules. This would require testing the distribution system of the water supply

every six months for total coliforms and *E. coli*. Due to the surface water source and lack of disinfection, it could be reasonably anticipated that some, if not all of those results would be positive, indicating contamination of the supply and the provision of unsafe drinking water in breach of s 21(1) of the WSA.

21. It is also unlikely that the population is actually 20 people. With 53 houses it could be expected that during the holiday season the population would peak, possibly to over 50 people for more than 60 days in a 12-month period. Further consumers at the DoC camp would increase that number. The DoC website indicates that the Torrent Bay Village Campsite includes 10 tent sites.
22. If the actual population exceeds the limits of a Very Small Community, compliance with the DWQAR's level one Rules would be required to demonstrate a supply of safe drinking water which would include centralised treatment and monitoring.
23. Under both the Very Small Communities rules module or the level one rules module, the Torrent Bay supply would also be required to provide for the use of residual disinfection (chlorination) as water is provided to consumers via a reticulated pipe network.
24. Compliance with any of these options, and the statutory duties that sit behind them, is problematic for the Torrent Bay supply. A general exemption would address this by excluding the application of the following duties (WSA references in brackets):
 - (a) to supply safe drinking water (s 21)
 - (b) to comply with drinking water standards (s 22)
 - (c) to take reasonable steps to provide aesthetically acceptable drinking water (s 24)
 - (d) to provide a sufficient quantity of drinking water to consumers at each point of supply (s 25)
 - (e) to protect against the risk of backflow (s 27)
 - (f) requirements relating to end-point treatment (s 28)
 - (g) to have a drinking water safety plan (s 30)
 - (h) to keep certain records (s 37), and
 - (i) to provide information to consumers (s 38).

Assessment process

25. The Exemption Team assessed the documentation provided and met with a TBTC representative by video conference on 15 December 2023 to discuss the application.
26. A site visit to the Torrent Bay supply has not been undertaken as the access is difficult and meeting health and safety requirements is challenging. The photographs provided with the application were considered sufficient to assess the supply.
27. The Exemption Team met with DoC on 18 September 2023 to discuss TBTC's application.

28. A draft Exemption Decision Paper was prepared and reviewed by another Taumata Arowai Exemptions Team member and legal counsel.

Assessment factors

29. TBTC's application has been assessed against the relevant factors set out in the WSA, Taumata Arowai policy and guidance material for exemption applications, and other considerations relevant to decision-making by Taumata Arowai and its staff.
30. Those factors, which shape the structure of the balance of this paper, are:
- (a) The scale, complexity and risk profile of the drinking water supply, which go both to the assessment of drinking water safety risks and also to the proportionality of regulation under the WSA.
 - (b) The Treaty of Waitangi / te Tiriti o Waitangi and its principles, which are relevant considerations under s 19(1)(b) of the Taumata Arowai—the Water Services Regulator Act 2020 (**TAWSRA**).
 - (c) Te Mana o te Wai, to the extent it applies to TBTC's application and the associated decision-making of Taumata Arowai.
 - (d) Consistency with the main purpose of the WSA: i.e. to ensure that drinking water suppliers provide safe drinking water to consumers.
 - (e) The Taumata Arowai Compliance, Monitoring and Enforcement Strategy 2022-2025 (**CME Strategy**). This is a matter that the Taumata Arowai Chief Executive, and any delegate of the Chief Executive, must have regard to when determining exemption applications.¹

Scale, complexity and risk

31. The Torrent Bay supply is a very small, simple supply. Under the DWQAR it is currently classified as a Very Small Community (0 – 25 people). As such, the supply must comply with the Very Small Communities and Varying Population rules modules within the DWQAR, unless another compliance pathway is adopted. As acknowledged above, the true population may be higher than the thresholds for these rules modules.
32. Given the supply's surface source, particular risks stem from activities in the source water catchment area; notably the risk of contamination from animals or people that are within the catchment.

¹ WSA, s 136(7); TAWSRA, s 11(2)(b).

33. While the supply is at risk of contamination, the overall risk is considered low due to the small population and likely short duration of stay. It is reasonable that short term-term visitors will boil their water, and those with residences may have end-point treatment. Previous surveys of properties by TBTC indicate end point treatment exists in some properties already, and there is agreement by other property owners to install similar units.
34. Point of use treatment or boiling of drinking water can be an effective tool for managing poor microbiological water quality in situations where centralised treatment is not practical or cost effective.
35. The relative scale, complexity and risk of the supply has been factored into the Exemption Team's assessment of TBTC's application and the commentary and recommendations in this paper.

The Treaty of Waitangi / te Tiriti o Waitangi and its principles

36. Taumata Arowai and its staff are required to uphold the Treaty of Waitangi (te Tiriti o Waitangi) and its principles when carrying out their functions.²
37. What this means in practice varies from situation to situation, depending on the relevance of Treaty/te Tiriti provisions and associated principles, including: partnership, self-determination, mutual benefit, honour, active protection, options, right of development, informed decisions, equity and equal treatment, and other principles that may be developed or identified as relevant from time to time. There is also some overlap between these principles and aspects of Te Mana o te Wai, which is discussed in the next section of this paper.
38. TBTC's application does not include any information about the interests of mana whenua or other Māori (including consumers who are Māori) in relation to the Torrent Bay supply, or indicate that any engagement with Māori has occurred in relation to the exemption application. This has a bearing on the Treaty/te Tiriti principle of informed decisions. The absence of specific information means that consistency with this principle has not been able to be considered in anything other than a generalised way. This overlaps with the consideration of Te Mana o te Wai as discussed below.
39. Discussion about consultation with mana whenua was undertaken with the Taumata Arowai Kaiwhakahaere Ārahi whose view was that given the size and location of the community, consultation by Taumata Arowai with Mana Whenua was not necessary.

Te Mana o te Wai

40. For the purposes of the WSA, Te Mana o te Wai is defined in the National Policy Statement for Freshwater Management 2020. Everyone exercising or performing a function, power, or duty under the WSA must give effect to Te Mana o te Wai when doing so, to the extent it applies to the function, power, or duty.

² TAWSRA, s 19(1)(b)(i).

41. Te Mana o te Wai is a water-centric concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.
42. The framework for Te Mana o te Wai involves 6 principles relating to the roles of tangata whenua and other New Zealanders in the management of freshwater, coupled with a hierarchy of obligations that prioritises:
 - (a) first, the health and well-being of water bodies and freshwater ecosystems;
 - (b) second, the health needs of people (such as drinking water); and
 - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.
43. Te Mana o te Wai is likely to have relatively limited application in the context of TBTC's general exemption application which is largely focussed on the circumstances of the supply and difficulties with meeting the requirements of the WSA. However, each case situation must be assessed on its facts and the extent of application of Te Mana o te Wai determined.
44. In this instance it is noted that the TBTC has not provided any information or commentary on the implications of its general exemption application from the perspective of Te Mana o te Wai.
45. Without the benefit of commentary from TBTC the most relevant matter the Exemption Team has identified in relation to Te Mana o te Wai is the leakage level and the associated risk of contamination of the supply. This represents a degree of wastage and water safety risk that is arguably inconsistent with the concept of Te Mana o te Wai. However, the supply is very small and the quantity of water abstracted from the environment is very small. Hence any leakage is unlikely to be of a significant quantity.
46. Additionally, there is an element of sustainability and respect for the water and environment associated with the supply. The community undertakes pest control in the supply catchment and from talking with the representative of the community it was clear that the house owners have a connection to and understanding of the local bush, freshwater and marine environment.

Consistency with the main purpose of the Water Services Act 2021

47. Section 57 of the WSA states that the chief executive must not grant an exemption unless satisfied that the exemption is consistent with the main purpose of the WSA (other than the duty to have a drinking water safety plan).
48. The main purpose of the WSA in s 3(1) is to ensure that drinking water suppliers provide safe drinking water to consumers.

49. One of the things a general exemption excludes is the duty to supply safe drinking water, which may appear to cut across the main purpose of the WSA. However, a general exemption can still be consistent with the main purpose of the Act. To achieve this, measures are required – including potentially the provision of information – to ensure consumers only consume safe drinking water (so they are unlikely to suffer death, injury, or illness from drinking it), even if it unsafe when supplied. In some situations, it is considered consistent with the purpose of the Act for drinking water to be made safe beyond the point of supply.
50. The Torrent Bay water supply is typical of water supplies in small remote holiday communities. It has been constructed and configured to reflect local circumstances. A lack of an available power supply and a stream at a higher elevation than the community has resulted in gravity fed untreated water being supplied to houses on a relatively informal basis. The distribution system is comparatively simple and short in length. Most risks in the supply are not and cannot easily be adequately managed except by a general notification to consumers to boil all drinking water.
51. The result is that, in the Exemption Team’s view, the water supply cannot reasonably be operated in accordance with the Act without a general exemption. For a general exemption to be granted and consistent with the main purpose of the WSA, conditions would need to be imposed on the water supplier that would ensure that water provided to consumers is able to be made safe to drink by end-point treatment or boiling. The relevant matters for conditions are discussed below.

Source water factors

52. Based on information provided in the application, the Exemption Team identified a risk of animal faecal waste from feral animals in the bushed catchment from which water is sourced. This presents a bacterial and protozoal risk to the supply.
53. The risk of contamination of the source water with human faecal waste material is very low as the catchment is part of the Abel Tasman National Park and human activity is generally confined to the tracks provided by DoC. The domestic on-site wastewater systems serving individual properties are not within the water supply catchment.
54. Risks of chemical contamination of the water source are considered to be minimal due to the native bush catchment and lack of historic human activity in the catchment. There is the possibility that DoC may undertake aerial spreading of 1080 for feral animal control though public health measures are in place when these activities are carried out and notification to any water suppliers in the area where this activity is carried out is mandatory.
55. The use of feral animal bait stations also represents a small risk of contamination of source waters with invertebrate pest control pesticides. However, the residents of Torrent Bay are involved in undertaking this activity in addition to any activity DoC undertakes and are in contact with DoC about this. The residents are aware of the low level of risk associated with these activities and when they occur.

56. The stream intake is rudimentary as could be expected, a stainless steel screen located in the stream bed. This can be expected to remove gross debris. A community member checks the screen from time to time for blockages, but formalised maintenance procedures are not in place and probably not necessary.
57. The key source water risk is bacterial and protozoal microbiological contaminants from feral animals that reside in the catchment. The extent of this contamination in the source water is likely to be low and intermittent, but still sufficient to cause water-borne illness if the water is consumed without treatment.
58. Consideration has been given to any future risks to source water that may result from any land use changes. Because the supply is located in a National Park this is unlikely but when subsequent exemption applications are made a review of any land use changes will need to be made.

Treatment factors

59. The supply does not include any treatment barriers, though the water post abstraction is passed through a 2000L tank intended to work as a sand trap. Following this the water then passes through 2 x 7500L and a single 15000L tank in series to allow for some sedimentation. It is intended that a rough filter will be included into the system at some time to further reduce sediment. Any overflow is directed back into the stream.
60. This arrangement does not constitute treatment though has the potential to reduce sediment load in the water supplied to houses connected to the supply.
61. It has been proposed by the TBTC that each property will eventually have its own point of use treatment consisting of a 20 micron and 1 micron filter with UV disinfection. They have also indicated that maintenance, monitoring and incident response plans to be developed. The model that has been used for this proposal is taken from the Taumata Arowai acceptable solutions.
62. There are some risks associated with this approach, particularly the blinding of filters due to the turbidity of the surface water source and the risk that residents don't adhere to the maintenance, monitoring and response plans, particularly in a community where the residents are not permanent.
63. The water that is supplied into the distribution system can be expected to contain any contaminants that were in the source water prior to abstraction.

Distribution factors

64. The distribution system consists of 50mm and 90mm parallel pipes which allow for redundancy if one is damaged. They discharge into a 100mm PVC main which flows around the community and provides water to the residents and 10 fire hydrants. Additionally, water is supplied to a tap at the TDC/DoC campground, TDC public toilet and 2 taps at the Torrent Bay jetty.
65. There is no indication that backflow prevention is provided at any connections and supply points are not metered. There is no pressure monitoring of the distribution system and an assessment of water loss has not been undertaken. This type of monitoring and assessment would not be expected in a supply of this size and type.
66. Key risks to the distribution system include the proximity to on-site wastewater systems, backflow, water loss and a lack of appropriate maintenance and repair.

Drinking water safety plan

67. The supply does not have a current drinking water safety plan. In the ordinary course of events a plan would be required under the WSA. However, if a general exemption is granted one will not be required.

Compliance, Monitoring and Enforcement Strategy

68. The CME Strategy outlines the approach Taumata Arowai will take to exemption applications. It provides part of the backdrop for the more detailed provisions in other Taumata Arowai policy and guidance material.
69. Amongst other things, the CME Strategy provides that Taumata Arowai will be guided by the following principles when determining exemption applications:
 - consumption of safe drinking water by consumers is paramount; and
 - the scale, complexity and degree of risk associated with a drinking water supply will affect the assessment of whether an exemption would be consistent with the main purpose of the WSA, to ensure that drinking water suppliers provide safe drinking water to consumers.
70. The Exemption Team has had regard to the relevant parts of the CME Strategy when conducting its assessment and preparing this paper. The principles recorded in the CME Strategy are reflected in the discussion above.

Additional comments

71. The Exemption Team considers that the Torrent Bay supply cannot reasonably comply with the ordinary requirements of the WSA.
72. This is due to the remote location of the supply, the lack of a suitable and reliable supply of electricity to the community which prevents the reasonable provision of a centralised water treatment system and the fact that there are no permanent residents living in the community and no one available to operate or monitor a treatment facility.

73. The community has proposed some measures to reduce the risks of water-borne illness to consumers, including the installation of end-point treatment systems and preparation of monitoring and response plans.
74. An additional and complicating factor in considering this application is that the supply provides water to publicly accessible taps in the TDC/DoC campground, a public toilet and two taps on the Torrent Bay Jetty.
75. If a general exemption is granted to the TBTC, the Exemptions Team consider it would need to include a condition that people be advised to boil all drinking water. This would be a responsibility of the water supplier, the TBTC. However, the taps at the Torrent Bay Campsite and jetty are not under the control of the TBTC or its members. TBTC will need to ensure that DoC is aware of the notice requirement and willing to assist TBTC with this. This has been tested with DoC (as the campsite operator) during the application process.

Proposed decision and conditions

76. The Exemption Team considers that the most effective method of ensuring water consumed by people served by the Torrent Bay drinking water supply is safe is to ensure all residences connected to the supply have end-point treatment (cartridge filtration and UV disinfection) or arrangements making occupiers aware of the need to boil drinking water, and to require notices advising people to boil all drinking water to be installed and maintained in visually prominent places at the taps at the Torrent Bay Campsite, public toilet, and jetty.
77. We consequently recommend that the general exemption is granted, subject to the following conditions:
Torrent Bay Township Committee must ensure:
 - (1) All private residences that receive drinking water from the Torrent Bay drinking water supply either have end-point treatment consisting of cartridge filtration and UV disinfection, or arrangements making occupiers aware of the need to boil water before it is consumed.
 - (2) Adequate signage advising consumers to boil water before drinking is installed and maintained in visually prominent places at the taps at the Torrent Bay Village Campsite, the Torrent Bay public toilet, and the taps at the Torrent Bay Jetty.
 - (3) Adequate signage advising consumers to boil water before drinking is installed and maintained in a visually prominent place if any new public taps are installed.
 - (4) Taumata Arowai is promptly informed of any new or altered circumstances that may change the hazards or risks affecting the supply.

Approval

The Exemption Team recommends that you:

- (a) **note** the Exemptions Team's view that, having regard to the scale, complexity and risk profile the Torrent Bay supply, the general exemption proposed by the Torrent Bay Township Committee is consistent with the main purpose of the Water Services Act 2021 (other than the duty to have a drinking water safety plan) and that it is otherwise impractical for it to comply with the statutory duties that would otherwise apply;
- (b) **agree** to approve a general exemption under section 57 of the Water Services Act 2021 for the Torrent Bay drinking water supply, subject to the conditions set out at paragraph 77 above.

Yes / No



Steve Taylor
Head of Regulatory

Date: 22 December 2023