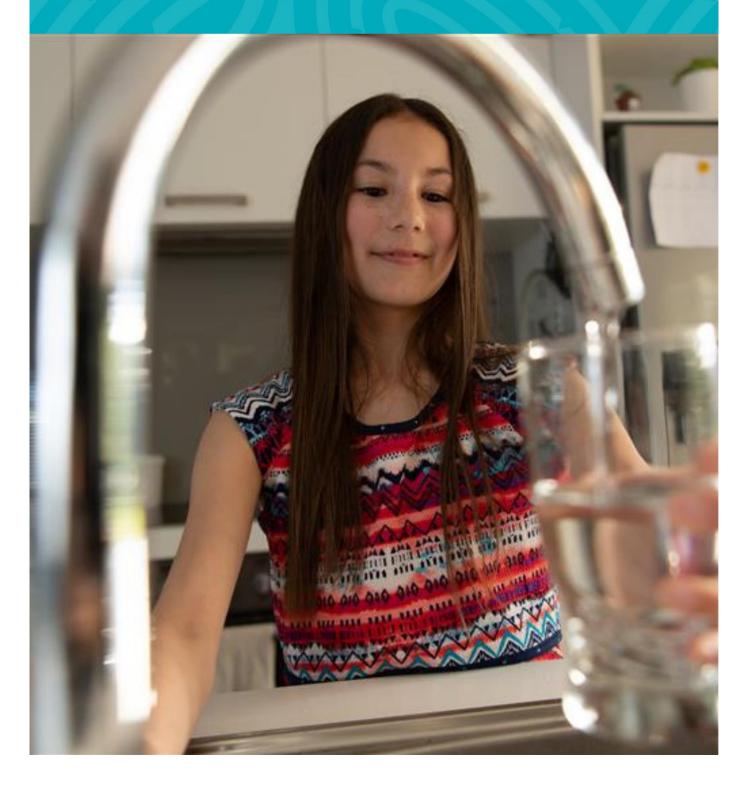


Consultation on proposed changes to Acceptable Solutions

Discussion document



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Introduction

Drinking water contains many microorganisms and chemicals. Most are harmless, but sometimes drinking water can become contaminated. Microorganisms like *Giardia* can cause serious illness, and this is why it's important that drinking water suppliers (suppliers) effectively treat drinking water so that it's safe to drink.

The Water Services Authority – Taumata Arowai (the Authority) puts requirements in place that suppliers must follow to protect people from getting sick from their drinking water.

These requirements include the Drinking Water Quality Assurance Rules (the Rules), that require centralised treatment (see visual below), or Acceptable Solutions that enable the use of cartridge filtration and UV disinfection systems to treat the water through units that are attached to or located near the buildings they serve (see end-point treatment visual below). These systems do not remove chemical contaminants such as nitrates, manganese or iron but do control microorganisms which are generally the biggest risk to health from drinking water.

In 2022, we issued the first set of Acceptable Solutions for drinking water supplies. These covered:

- mixed-use rural water supplies
- spring and bore water supplies
- roof water supplies.

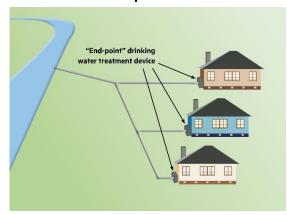
Increasing the uptake of Acceptable Solutions is likely to help improve the safety of drinking water, especially in rural areas or other places where centralised treatment and following the Rules may be less cost-effective or impractical, compared with using an Acceptable Solution. We have recently engaged with parts of the sector who have identified several areas where we can improve the Acceptable Solutions and their likely uptake.

The changes proposed to the Acceptable Solutions in this discussion document aim to reduce complexity and minimise compliance costs, while still managing the most significant risks to health. Acceptable Solutions are the proposed technical and legal requirements. They are minimum requirements and don't always specify exactly what needs to be done to satisfy them. We will produce guidance to help people who are using or considering Acceptable Solutions and make this available alongside the final Acceptable Solutions.

Visual: Centralised treatment



Visual: End-point treatment



How to make a submission

The Authority is consulting on proposed changes to the Drinking Water Acceptable Solutions.

We invite submissions from all interested parties. Throughout this document, you will find consultation questions highlighted in boxes. A complete list of questions is available in Appendix 1. You can answer any questions you like. Where possible, please include evidence to support your views, for example, references to facts and figures or relevant examples.

You will find all the information on this consultation on the Authority website at korero.taumataarowai.govt.nz/regulatory/acceptable-solutions

Timeframes

The consultation is open from 1 May to 13 June 2025. Please send us your submission on the proposals and questions raised in this document by 5.00pm on 13 June 2025.

We encourage you to provide feedback, if possible, by:

- completing the online survey
 - Note: if you start responding to this consultation online and want to return to it later, select the 'save and come back later' option at the bottom of the page to save your progress.

You can also send us your responses to the consultation questions in this discussion document:

- by email at korero@taumataarowai.govt.nz
- by post to Level 2, 10 Brandon Street, PO Box 628, Wellington 6140, New Zealand.

Please include your name, or the name of your organisation, and contact details in your submission.

Appendix 2 explains how the Authority will use any information you provide in a submission or feedback form in response to this discussion document. We appreciate your time in providing feedback.

Please direct any questions you may have in relation to the submission process to: korero@taumataarowai.govt.nz

Following the consultation period, we will analyse the feedback received and finalise the Acceptable Solutions. The new documents are expected to be published on our website in August 2025. We also plan to release accompanying guidance materials to support implementation.

Background

This discussion document summarises proposed technical changes to the Acceptable Solutions.

For a high-level overview to key changes, read these information sheets:

- Overview of the three proposed Acceptable Solutions
- Overview of key changes proposed.

For technical detail, you may want to read the full text of the proposed Acceptable Solutions:

- Water Services (Mixed-use Rural) Drinking Water Acceptable Solution 2025
- Water Services (Small and Medium Networks) Drinking Water Acceptable Solution 2025
- Water Services (Self-supplied Buildings) Drinking Water Acceptable Solution 2025.

The <u>current set of Acceptable Solutions</u> is also available on our website.

Definitions of technical terms and acronyms used in this document can be found in Appendix 3.

Summary of key changes

The key changes proposed are:

- 1. Basing Acceptable Solutions on supply type (i.e. Mixed-use Rural supplies, Small and Medium Networked supplies and Self-supplied Buildings) rather than source water type (e.g. roof water).
- 2. Including surface water in the new Acceptable Solutions to allow a greater proportion of drinking water suppliers to make use of an Acceptable Solution.
- 3. Removing the requirement to use validated end-point UV disinfection systems, as part of the requirements for end-point treatment, in some circumstances (validation of UV disinfection systems is explained below).
- 4. Allowing up to 10 buildings to be supplied from a single treatment system in the proposed Acceptable Solution for Self-supplied Buildings.
- 5. Clarifying supplier responsibilities to make meeting requirements easier to follow.
- 6. Separating acceptable solution requirements and guidance so suppliers and consumers can more easily follow what are requirements.

Proposed changes and consultation questions

1. Making all the Acceptable Solutions based on supply type rather than some being based on source water type

We currently have Acceptable Solutions covering:

- mixed-use rural water supplies
- spring and bore water supplies
- roof water supplies.

We propose keeping the Acceptable Solution for Mixed-use Rural with amendments as proposed in this document.

We propose creating two new Acceptable Solutions based on the supply type rather than the type of source water used. This change will make it easier for water suppliers to identify what Acceptable Solution to comply with, as supplies are often using more than one source water and were having to cross-reference between the existing Acceptable Solutions.

The two proposed new Acceptable Solutions are:

- Acceptable Solution for Small and Medium Networked supplies
- Acceptable Solution for Self-supplied Buildings.

Acceptable Solutions set out the requirements for using 'end-point treatment' technologies instead of a centralised treatment system. End-point treatment treats water before it is used, with cartridge filters and a UV disinfection system. Typically, end-point treatment units are attached to or located close to the building or buildings being served.

The existing Acceptable Solutions for Roof, and Spring and Bore, would be revoked. We are proposing a legacy clause for currently compliant supplies (see below).

Surface water has been added as an allowable source alongside roof water and spring or bore water in all Acceptable Solutions. There are specific risks with surface water that need to be managed, for example, cyanobacteria and elevated turbidity. The Acceptable Solutions provide requirements to manage those risks.

The installation of end-point treatment, requirements around backflow and monitoring, providing information to property owners, operator capability and managing emergencies are contained in all three Acceptable Solutions.

Acceptable Solution for Small and Medium Networked supplies

The proposed Acceptable Solution for Small and Medium Networked supplies is aimed at supplies where it might not be cost-effective to install centralised treatment. The installation of end-point treatment systems is likely to be more cost-effective while still appropriately managing key safety risks.

The supply must serve fewer than 500 people. Here is an example of this kind of supply.

• A surface water supply serving 40 homes. Most of these are holiday homes that are unoccupied outside of the school holidays. While the holiday population can increase to up to 120 people, for most of the year 35 people live here.

Acceptable Solution for Self-supplied Buildings

The proposed Acceptable Solution for Self-supplied Buildings is aimed at supplies that serve a small number of buildings on one property or adjoining properties in common ownership.

The supply must serve no more than 500 people. Here are some examples of self-supplied building drinking water supplies.

A rural school with 55 students and staff that sources water from a bore. The supply serves
three classroom buildings, a maintenance shed and an administration building, all located on
the same property.

- A marae comprises a wharenui (meeting house), wharekai (dining hall), ablutions block, kitchen, k\(\bar{o}\)hanga reo, and whare kaum\(\bar{a}\)tua (elder flats) a total of eight buildings. The supplied water from a spring and rainwater is distributed to these buildings, located on three neighbouring properties under common ownership. The marae population is 45 people on a regular day. This includes whare kaum\(\bar{a}\)tua residents and k\(\bar{o}\)hanga reo students.
- A hotel in a remote location with its own bore water supply which has capacity for 150 occupants, including staff and guests. The supply also provides water to a maintenance building on the same site.

We would like your feedback on the following question:

• Do you agree that the proposal for two new acceptable solutions will make it easier for water suppliers to identify what Acceptable Solution to comply with?

2. Allowing end-point treatment where the UV disinfection systems are not validated in some circumstances.

A unique feature of Acceptable Solutions is the ability to use end-point treatment systems to treat drinking water to make it safe. These systems use UV and cartridge filtration to treat and disinfect the water.

UV disinfection treatment inactivates microorganisms (such as *Giardia*) by damaging their DNA, preventing them from multiplying and infecting people and causing illness. To be effective, the UV light must provide a continuous minimum dose. This is measured in millijoules (mJ) over an area measured in square centimetres (cm²), expressed as: mJ/cm². The required dose of 40 mJ/cm² is to ensure both bacterial and protozoal (and most viral) pathogens are inactivated.

The end-point treatment system needs to be operated according to the manufacturer's instructions to ensure it will provide effective treatment.

Validated end-point UV disinfection treatment systems

The current Acceptable Solutions require the end-point treatment systems to be 'validated'. This means that the UV disinfecting performance of the systems meets various international standards. Features of validated end-point treatment systems include:

- integrated UV sensors with audio/visual alarms to alert users if performance drops
- flow restrictors to ensure the UV dose does not fall below the required threshold specified by the manufacturer.

We consider validated end-point treatment systems are needed to provide greater safety assurance where the supply risk profile is higher, where more than 25 people are supplied, or water is supplied to 'community purpose' or 'public' buildings. More detail is provided below.

End-point UV treatment systems that are not validated

End-point treatment systems that are not validated are also available and tend to be less expensive. An effective end-point UV disinfection system that is not validated is estimated to cost approximately \$4,000 less than a validated system. This will also mean that LED UV systems may be appropriate, which will reduce power and maintenance costs, and increase flexibility to use 'off-grid'.

End-point treatment systems that are not validated are widely used in residential settings and, when appropriately selected and maintained, can successfully disinfect water.

- End-point UV disinfection systems that are not validated often have indicators for lamp hours and alerts for lamp replacement. Good products provide a measure of lamp hours and a prompt when the UV lamp needs replacement.
- Suppliers must confirm the UV system can deliver and maintain the required dose of 40 mJ/cm² as specified by the manufacturer. The manufacturer should clearly state in the specifications that the system can achieve and maintain this dose.

End-point treatment systems that are not validated are appropriate in some circumstances

We have carefully considered whether validated end-point treatment systems should be required in all cases, or whether other systems can provide a more cost-effective and safe option. The cost of validated end-point treatment systems can be prohibitive for some suppliers and consumers.

Our assessment is that in situations where there are lower numbers of consumers and where the consumer has control of the end-point treatment system that is not validated but is providing a 40 mJ/cm² dose, this will provide a sufficient level of confidence of disinfection.

In situations where there are higher numbers of consumers who may not know where the drinking water is coming from or who is responsible for ensuring the water is safe to drink, it is appropriate that microbiological risks are managed by validated end-point treatment systems.

Situations where we consider validated end-point UV disinfection systems will be required

The proposed Acceptable Solution for Self-Supplied Buildings requires validated UV disinfection systems for these supplies.

Similarly, the proposed Acceptable Solutions for Mixed-use Rural and Small and Medium Networked supplies require designated kinds of supplies to have validated end-point treatment systems, specifically:

"An end-point treatment UV disinfection system must be validated to NSF/ANSI 55 Class A at any connected property—

- (a) with a base population that exceeds 25 people; or
- (b) with a base population of any size, if—
 - (i) the property has a community purpose (for example, a school, marae, sports club, or community hall); or
 - (ii) the property has drinking water available to the public (for example a cafe, hotel, or camping ground).

Proposal to remove some end-point treatment system requirements

We propose removing the following validation standards for end-point treatment systems as they are typically used for large-scale systems outside the intended scope and are significantly more expensive than the NSF/ANSI 55 Class A standard:

- Ultraviolet Disinfection Guidance Manual (USEPA 2006b)
- DVGW Technical Standard W294 (DVGW 2006).
- ÖNORM M 5873-1: 2020 01 01.

We also propose removing some of the other requirements for end-point treatment systems that were included in the original acceptable solutions. For example, requirements for flow control, automatic shutdown, air release valves and manual isolation valves. We intend including relevant information in guidance.

Legacy clause

We propose retaining an existing legacy clause in the current Acceptable Solutions to account for end-point UV disinfection systems that were already in place when the current Acceptable Solutions came into force:

"Validation is not required where a UV disinfection system was installed before 17 October 2022 and written evidence is available from the manufacturer (for example, the manufacturer's website, or the instruction manual) that the unit delivers a minimum UV reduction equivalent dose of 40mJ/cm²."

We are also proposing that where suppliers were meeting the requirements of the current Acceptable Solutions, they would be deemed compliant for 1 year from the commencement of the new Acceptable Solutions. We anticipate that compliance with new requirements will be less than for current requirements, and therefore should not pose difficulties.

We would like your feedback on the following questions:

- Do you agree with the proposal to allow end-point UV disinfection systems that are not validated where 25 people or fewer are supplied and it is not a supply for a community purpose or public building?
- Do you agree with the proposed situations where validated end-point UV disinfection systems will still be required?
- Do you agree with the proposal to remove some end-point treatment system requirements that are in the current Acceptable Solutions?
- Do you agree that the legacy clause is still required?

3. Suppliers to provide information to consumers

Regular testing of source water is a critical step to ensure suppliers and consumers better understand any changes to their drinking water source and therefore what treatment is needed to make the water safe to drink.

Better educating consumers on their drinking water is important for good management of supplies. We propose that suppliers provide:

source water monitoring results to all property owners and consumers when available

- annual advice to property owners and consumers on their need to test treated water and manage risks (e.g. untreated and treated water storage, and additional testing requirements if the population exceeds the base population)
- information to property owners who are required to install, maintain and test end-point treatment devices on an annual basis.

We would like your feedback on the following question:

 Do you agree with the proposed requirements for suppliers to provide information to property owners and consumers on source water monitoring, annual testing and treatment advice, and (where necessary) what end-point treatment devices to install, maintain and test?

4. Aligning the Acceptable Solution for Self-supplied Buildings with the Rules requirements

The Acceptable Solution for Self-supplied Buildings proposes allowing up to 10 buildings to be supplied from a single treatment system. This aligns with the Rules for Self-supplied Buildings supplies. This Acceptable Solution will enable buildings on commonly owned properties, e.g. a school or marae to supply treated water from one to 10 buildings within the boundaries of that property.

Drinking water suppliers who comply with an Acceptable Solution are not required to prepare or implement a drinking water safety plan (DWSP). Therefore, this Acceptable Solution includes specific criteria and risk minimisation measures to address the potential risks of supplying multiple buildings from a single treatment system.

There are always openings in storage tanks where contamination can enter, e.g. hatches, overflows and air vents. In the absence of a DWSP and any requirement for residual disinfection, it is proposed that checking the security of treated water storage tanks is undertaken every three months and includes ensuring tanks are secured against the accidental ingress of:

- rainwater
- surface water

And that inlets, lids, overflows and any other small gaps in tanks are secure from contamination by:

- vermin
- birds,
- other animals,
- faecal matter
- any other material.

There are also risks that must be managed in a distribution system. Any breaks or leaks in the pipes would mean the water could become contaminated. Given there is no requirement for chlorination in the Acceptable Solution, it is proposed that pipes must be laid away from high-risk areas. These include areas that are:

close to septic tanks

- waste ponds
- landfills
- offal pits
- areas where pesticides or animal effluent is applied to land.

We would like your feedback on the following questions:

- Do you agree with the proposed increase to 10 buildings to be supplied from a single treatment system on the same property or in common ownership?
- Do you agree with the proposed requirements that must be met for the increase to 10 buildings to be permitted including an increase in inspections of storage tanks to every 3 months?

5. Changing the requirements for pre-requisite and ongoing monitoring

Source water monitoring requirements

It is important to test source water to determine the suitability for cartridge filtration and UV disinfection and to ensure the water will remain safe after treatment.

The proposed changes to the monitoring requirements have been aligned with the Rules for source water monitoring.

Additional monitoring that is required in the current Acceptable Solutions, which requires at least three samples to be tested and for sampling to represent a range of environmental conditions, has been removed. It is considered that additional sampling is more suitable as a recommendation in guidance.

Water suitable for end-point treatment

The Acceptable Solutions specify requirements for water to ensure it is suitable for end-point treatment. This includes requirements for:

- turbidity (a measure of water clarity)
- UV transmittance
- iron
- manganese
- any other chemical determinands.

6. Specific performance criteria to address turbidity

Turbidity is a particular issue to manage for supplies with surface water sources. We therefore propose a specific performance requirement for turbidity that suppliers must meet for cartridge filters:

• **Turbidity** must be low enough (for example, <1NTU) to ensure cartridge filters will last for at least one month before water will not pass through them.

In addition to the turbidity requirement, we propose the following requirements:

- **UV transmittance** must be high enough (for example, >90%) for the UV to meet the required dose.
- **Iron** must be low enough to ensure the UV system sleeve is not fouled with iron deposits within one year before cleaning is required.
- **Manganese** must be low enough to ensure the UV system sleeve is not fouled with manganese deposits within one year before cleaning is required.
- Chemical determinands in the drinking water standards must not exceed their respective maximum acceptable values (MAV), (for instance, arsenic or nitrates to help ensure consumers receive safe drinking water).

Guidance will be provided on the above requirements including specific guidance on how to manage turbidity issues associated with surface water sources to ensure adverse impacts on treatment systems are minimised.

We would like your feedback on the following questions:

- Do you agree with the proposed changes to the pre-requisite monitoring?
- Do you agree with the turbidity performance requirement?
- Do you agree with the UV transmittance performance requirement?

7. Making the monitoring requirements more proportionate to the risk

The monitoring requirements in the current Acceptable Solutions are more onerous than the Rules requirements for supplies serving 26 – 500 people. For example, the Acceptable Solution for Spring and Bore requires sampling downstream of any pre-treatment every three months for certain determinands and annually for others.

In contrast, the Rules mainly require source water testing ranging from annually to three years for similar determinands.

The Rules also only require annual monitoring for any chemical determinands that are found to exceed 50% of the Maximum Acceptable Value (MAV) in the source water. MAVs set out the maximum amounts of metals and other substances that are acceptable in drinking water from a public health perspective.

The proposed Acceptable Solutions monitoring requirements specify at least annual monitoring for the specified parameters to align with the Rules requirements.

Guidance will be provided to cover situations where more frequent monitoring is recommended.

8. Proposal to remove certain monitoring requirements

Silica does not have a MAV. Therefore, it is proposed to remove requirements to monitor for it.

Monitoring requirements for benzo[α]pyrene and zinc have been removed from the Acceptable Solutions requirements. This aligns with the Rules for supplies serving 26 – 500 people that do not require monitoring for benzo[α]pyrene and zinc for roof water sources. Benzo[α]pyrene is only a risk

for roof water supplies that get soot deposited on the roof. Zinc impacts how drinking water tastes. However, there is currently no MAV for zinc.

We propose providing guidance related to silica, benzo[α]pyrene and zinc rather than including monitoring requirements in the Acceptable Solutions.

9. Post-treatment monitoring

We propose removing the post-treatment monitoring requirement from the Acceptable Solutions for Mixed-use Rural and Small and Medium Networked supplies because this can create difficulties for suppliers around access to private property. There will be guidance for suppliers, property owners and consumers on what steps can be taken to manage post-treatment testing for their supplies and the Policy Statement and Flowchart also provide guidance (see section 10 below).

Instead, we propose requiring suppliers to provide in writing (at least annually) to all property owners and consumers at connected properties, a recommendation to test treated water at least every six months for *E. coli* and total coliforms.

Post-treatment monitoring for *E. coli* and total coliforms remains a requirement under the Acceptable Solution for Self-supplied Buildings as the supplier will usually have more direct control over infrastructure including post-treatment systems.

We would like your feedback on the following questions:

- Do you agree with the proposed changes to the monitoring requirements?
- Do you agree with the proposed post-treatment monitoring requirements for self-supplied buildings?

10. Clarifying the responsibilities of property owners

Some clauses in the current Acceptable Solutions do not clearly distinguish the responsibilities of water suppliers and property owners/consumers. The proposed revisions clarify these roles to better align with the Water Services Act 2021.

Further guidance will be provided on the responsibilities of both water suppliers and property owners.

In February 2025, we published a policy statement and flowchart to help clarify who holds specific responsibilities under an Acceptable Solution:

- read the policy statement
- see the flowchart.

11. Requirements when base population limits are exceeded

The current Acceptable Solutions place significant monitoring responsibilities on suppliers when the base population temporarily increases (e.g. during events or gatherings).

To align with the Rules, we propose the following changes.

• For Mixed-use Rural and Small and Medium Networked Buildings supplies:

- suppliers must recommend that property owners and consumers with end-point treatment carry out weekly monitoring when the base population exceeds 100 people (for 2 or 3 buildings) or
- o 500 people (for a single building).
- For Self-supplied Building supplies:
 - Since the supplier controls the entire supply, including post-treatment infrastructure, weekly monitoring is required when base populations exceed 100 or 500 people (as above).

We would like your feedback on the following question:

 Do you agree with the proposed requirements when there is an exceedance of base population limits?

12. Allowing for downstream supplies in the Acceptable Solution for Mixed-use Rural supplies

There are mixed-use rural schemes that supply water to communities who then treat the water through a centralised treatment system (i.e. downstream supply).

Here are some examples of downstream drinking water supplies.

- A mixed-use rural scheme supplies water to a small town. Instead of end-point treatment
 devices being installed at every house, the local council has decided to treat all the water for
 the small town at a central point. The local council agrees that it is responsible for the small
 town. This small town is considered a downstream supply.
- A rural school has its own rainwater supply treated by filtration and UV and is currently
 registered. One dry summer the school agrees with the local mixed-use rural water system to
 run a line to fill up the rainwater tank. In this situation, the rural school is considered a
 downstream supply.

It is proposed that the Acceptable Solution for Mixed-use Rural supplies will now recognise that endpoint treatment is not required in a downstream supply where a connected drinking water supply has centralised treatment in place.

The Authority will shortly undertake consultation on downstream supplies to determine when a person who connects to a registered supply and on-supplies drinking water to others is considered:

- a supplier who must meet compliance requirements under the Act, such as to register and prepare a DWSP, or
- a consumer.

If you are interested in learning more about downstream supplies, the consultation document will be available on our website in mid-May.

We would like your feedback on the following question:

• Do you agree with the proposal that end-point treatment is not required in a downstream supply which provides centralised treatment?

13. Use of other centralised treatment

Many supplies already use additional or centralised treatment to improve water quality before endpoint treatment. The revised Acceptable Solutions clarify that suppliers are allowed to use centralised treatment, including chlorination, to enhance drinking water quality. This acknowledges the benefit of supplementary treatment to reduce risks. Supporting guidance will cover commonly used options such as selective abstraction and filtration.

14. Removal of references to Building Act requirements

References to the Building Act 2004 requirements have been removed from the Acceptable Solutions as any applicable requirements must be met by the building owner regardless of Acceptable Solution requirements.

15. Clarifying that suppliers can supplement the water supply with other sources

The Acceptable Solutions will clarify that consumers or property owners connected to a mixed-use rural or small and medium networked drinking water supply may supplement it with water from other sources. This is particularly relevant in time of drought or other water supply shortages. Examples include:

- roof water collection
- water from registered water carriers.

16. Backflow prevention requirements

The Acceptable Solutions will specifically recognise air gaps as an effective form of backflow prevention. To ensure continued effectiveness, the air gap must be inspected annually.

17. Operation and maintenance

The revised Acceptable Solutions will not have a specific clause for operation and maintenance. The requirements are met through other clauses, for example, record keeping and clauses requiring specific information to be provided to consumers.

Guidance will be provided on the information and documentation that a water supplier should develop and retain to support the ongoing operation and maintenance of the supply.

18. Incidents and emergencies

We have simplified requirements in the Acceptable Solutions. The clause is intended to cover the supply and not issues that may be specific to a single connection.

Events and emergencies that could compromise the ability of end-point treatment systems to make drinking water safe or put the supply of a sufficient quantity of drinking water at risk, must be identified and documented.

A response plan must be developed and followed for each event or emergency identified. Examples of events or emergencies that may mean end-point treatment does not make the water safe include weather events causing increased turbidity and chemical contamination events.

Here are some examples of events and emergencies that can affect a supply:

- A mixed-use rural scheme takes water from a lake. One summer the regional council issues a
 warning that the water in the lake is no longer suitable for swimming due to cyanobacteria
 (blue-green algae) that can produce a toxin. The end-point treatment installed will not make
 the water safe.
- A small network supply takes water from a bore. After an earthquake, water from the bore has changed and is visibly cloudy.

Guidance on managing and responding to incidents and emergencies will be provided.

19. Record keeping

The proposed Acceptable Solutions will include a dedicated clause on record keeping. Suppliers must retain the specified records for at least three years. These records support transparency, traceability and system performance reviews.

20. Competency

The proposal is to add a clause on competency to reflect the training requirements included in previous Acceptable Solutions. This ensures that anyone operating or maintaining the drinking water supply must be appropriately trained or experienced to meet the Acceptable Solution requirements.

Guidance will be provided on what we consider to be appropriately trained or experienced.

We would like your feedback on the following question:

Do you agree with the proposal to include competency requirements?

Seeking feedback on other matters

To ensure these proposed changes are fit for purpose, we invite feedback from stakeholders, particularly the technical sector, on the following matters.

- 1. **Te Mana o te Wai**: Do you consider that the proposed changes in this document will help to give effect to Te Mana o te Wai?
- 2. **Guidance needs**: What additional support is needed to help suppliers and property owners understand their responsibilities? What topics would you like to see covered in guidance? What format(s) would you like guidance to be provided in, e.g. written, webinars? What channels should we use to get information to the people who need it?
- 3. **Implementation concerns**: Are there any barriers to adopting these changes and how can they be addressed?
- 4. **How Acceptable Solutions are presented:** Is it better to have one Acceptable Solution that covers all three scenarios or is it better to keep them as separate documents?
- 5. **Challenges for your supply:** Would the proposed approach to the changes create any challenges for your organisation? If so, what are they likely to be?
- 6. **General comments:** Do you have any general comments you'd like to make about the proposed changes?

Next steps

Following this consultation, the Authority will refine the draft Acceptable Solutions based on feedback received. The final versions will include additional guidance and support to ensure effective implementation.

Your insights are invaluable to ensure that this framework achieves its goals of maintaining drinking water safety while keeping compliance costs proportionate to the scale, complexity, and risk profile of different drinking water supplies.

We have included a list of all the questions we ask through our consultation platform in Appendix 1 of this document to help you prepare submissions. However, we ask that, if possible, you use the online consultation platform to make your submission as that makes it easier for us to analyse the submissions received

Please provide your feedback on these proposed changes by 5pm, Friday, 13 June 2025.

Appendix 1: Consultation questions

This discussion paper includes some questions you may like to respond to in your submission. The questions are listed as boxes in this document and the full list of questions is provided below.

The following questions will be asked through our consultation portal. We ask that you provide responses via the portal as this greatly assists our analysis of submissions and allows us to process submissions more efficiently. The questions below are provided to facilitate preparation of your answers before entering them into the consultation portal.

Making all the Acceptable Solutions based on supply type rather than some being based on source water type:

 Do you agree that the proposal for two new acceptable solutions will make it easier for water suppliers to identify what Acceptable Solution to comply with?

Allowing end-point treatment systems that are not validated in some circumstances:

- Do you agree with the proposal to allow end-point treatment systems that are not validated where 25 or fewer are supplied and it is not a supply for a community purpose or public building?
- Do you agree with the proposed requirements where validated end-point treatment systems will still be required?
- Do you agree with the proposals to remove some end-point treatment system requirements that are in the current Acceptable Solutions?
- Do you agree that the legacy clause is still required?

Suppliers to provide information to consumers:

Do you agree with the proposed requirements for suppliers to provide information to
property owners and consumers on source water monitoring, annual testing and treatment
advice, and (where necessary) what end-point treatment devices to install, maintain and
test?

Aligning the Acceptable Solution for Self-supplied Buildings with the Rules requirements:

- Do you agree with the proposed increase to 10 buildings to be supplied from a single treatment system on the same property or in common ownership?
- Do you agree with the proposed requirements that must be met for the increase to 10 buildings to be permitted including an increase in inspections of storage tanks to every 3 months?

Changing the requirements for pre-requisite monitoring:

Do you agree with the proposed changes to the pre-requisite monitoring?

Specific performance criteria to address turbidity:

- Do you agree with the turbidity performance requirement?
- Do you agree with the UV transmittance performance requirement?

Proposal to remove certain monitoring requirements:

• Do you agree with the proposed changes to the monitoring requirements?

Post-treatment monitoring:

 Do you agree with the proposed post-treatment monitoring requirements for self-supplied buildings?

Requirements when base population limits are exceeded:

• Do you agree with the proposed requirements when there is an exceedance of base population limits?

Allowing for downstream supplies in the Acceptable Solution for Mixed-use Rural supplies:

 Do you agree with the proposal that end-point treatment is not required in a downstream supply which provides centralised treatment?

Competency:

Do you agree with the proposal to include competency requirements?

Feedback on other matters:

Te Mana o te Wai:

 Do you consider that the proposed changes in this document will help to give effect to Te Mana o te Wai?

Guidance needs:

 What additional support is needed to help suppliers and property owners understand their responsibilities? What topics would you like to see covered in guidance? What format(s) would you like guidance to be provided in e.g. written, webinars? What channels should we use to get information to the people who need it?

Implementation concerns:

Are there any barriers to adopting these changes, and how can they be addressed?

How Acceptable Solutions are presented:

• Is it better to have one Acceptable Solution that covers all three scenarios, or is it better to keep them as separate documents?

Challenges for your supply:

 Would the proposed approach to the changes create any challenges for your organisation? If so, what are they likely to be?

General comments:

Do you have any general comments you'd like to make about the proposed changes?

Appendix 2: Use of information

The information provided in submissions will be used to inform policy development and options analysis. The Authority may contact submitters directly if clarification of any matters in submissions or other feedback is needed.

Publication of submissions

Following consultation and analysis of feedback, new Acceptable Solutions will be published. The Authority may publish copies of submissions, and a summary of submissions, on its website. Submissions may also be the subject of requests under the Official Information Act 1982.

Please clearly indicate if you have any objection to the publication or release of your submission or any information within it, the parts of your submission you consider should be withheld, and the reasons for withholding. If you notify us of an objection, the Authority will take your views into account and will consult with you to the extent the Authority considers necessary before publishing your submission or responding to any relevant request for official information.

Personal information

The Privacy Act 2020 establishes certain principles with respect to the collection, use and disclosure of information about individuals by various agencies including the Authority. Any personal information you include in your submission will only be used for the purposes set out in this 'Use of information' section, for contacting you about your submission, or to advise you of the outcome of the consultation including any next steps.

The Authority may also use personal information you include in your submission for other reasons permitted under the Privacy Act (e.g. with your consent, for a directly related purpose, or where the law permits or requires it). Please clearly indicate in your submission if you do not wish your name, or any other personal information, to be included in any published copy of your submission or included in any summary of submissions.

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Appendix 3: Definitions

Term	Definition
Act	The Water Services Act 2021.
determinand	A substance or characteristic that is determined or estimated in drinking water.
domestic self-supply	Means a stand-alone domestic dwelling that has its own supply of drinking water. As defined in section 10 of the Act.
Drinking Water Quality Assurance Rules or the Rules	The <u>Drinking Water Quality Assurance Rules</u> made by Taumata Arowai under section 49 of the Act.
drinking water supplier	As defined in section 8 of the Act: Unless the context otherwise requires, drinking water supplier— (a) means a person who supplies drinking water through a drinking water supply; and (b) includes a person who ought reasonably to know that the water they are supplying is or will be used as drinking water; and (c) includes the owner and the operator of a drinking water supply; and (d) includes a person described in paragraph (a), (b), or (c) who supplies drinking water to another drinking water supplier; but (e) does not include a domestic self-supplier.
drinking water supply	As defined in section 9 of the Act: Unless the context otherwise requires, drinking water supply— (a) means the infrastructure and processes used to abstract, store, treat, transmit, or transport drinking water for supply to consumers or another drinking water supplier; and (b) includes— a. the point of supply; and b. any end-point treatment device; and c. any backflow prevention device; but (c) does not include a temporary drinking water supply provided for under sections 33 or 34 of the Act or a domestic self-supply.
DWSP	Drinking Water Safety Plan.
end-point treatment or EPT	As defined in section 5 of the Act: Treatment of drinking water at the final point of the supply at which the consumer can consume, use, or collect drinking water.

maximum acceptable value or MAV	The maximum acceptable value of a determinand that is permitted in drinking water. The full range of MAVs for relevant determinands is set
value of Winy	out in the <u>Water Services</u> (<u>Drinking Water Standards for New Zealand</u>) Regulations 2022.
operations and maintenance manual	A hardcopy or electronic document that outlines how to operate and maintain the drinking water supply under a drinking water acceptable solution.
roof water	The rainwater collected from the roof of a building or structure.
surface water	A body of water that is open to atmosphere, whether running (streams
	and rivers) or quiescent (lakes, reservoirs, impoundments and ponds). Surface water does not include spring or bore water.
Taumata Arowai or the Authority	Taumata Arowai–the Water Services Regulator or the Water Services Authority–Taumata Arowai, established under the Taumata Arowai–the Water Services Regulator Act 2020.
total base population	Total base population of the water supply is the population that is normally supplied drinking water by all end-point treatment systems regardless of any seasonal or temporary increases.
uv	Ultraviolet light.
UVI	The intensity of UV radiation, usually measured in mJW/cm ² .
Validated unit	End-point treatment that meets the standard NSF/ANSI 55 Class A.
Water Services (Drinking Water Standards for New Zealand) Regulations 2022	The Water Services (Drinking Water Standards for New Zealand) Regulations 2022 made under section 47 of the Water Services Act 2021.