

Drinking water frequently asked questions

<p>Our water was fine before – what’s changed?</p>	<p>The <u>Havelock North Drinking Water Inquiry</u> made a number of recommendations to improve safety of New Zealand’s water supplies and changes to our Drinking Water Standards.</p> <p>The Government has identified that illness from the country’s public water supplies is significant, with up to 100,000 people getting sick every year. The uncomfortable reality is that New Zealand’s water networks have probably been housing dangerous pathogens (bugs) for years.</p> <p>Two of the main outcomes for Napier from the Havelock North Inquiry have been:</p> <ul style="list-style-type: none"> • The raising of bore heads above ground level to stop surface water entering the bore and potentially contaminating the water. • Chlorination of the pipe network following seven minor contamination issues in our reservoirs and pipe system. <p>The water we extract from the Heretaunga Plains Aquifer is of a very high quality, however, like the majority of other public water supplies, our network is at risk of becoming contaminated. One of the ways to reduce this contamination risk is to have disinfection in the network, and this is provided by chlorine.</p>
<p>What work has been done to improve the security and safety of the Napier water supply since the Havelock North Drinking Water Inquiry?</p>	<p>We have many drinking water projects planned and underway. You can read more details about them here.</p> <ul style="list-style-type: none"> • Three bores have been brought above ground • Upgrades have been made to underground bore chambers to make them safe • Close down of two bores that didn't meet requirements • Improvements to water reservoirs • Introduction of chlorine treatment at the source • Increased planned maintenance of the supply system including extensive mains cleaning projects to remove biofilm (the accumulation of organic and inorganic matter attached to the insides of pipes and water storage tanks) from our water network.
<p>How can our water become contaminated?</p>	<p>Any of the examples below could result in contaminants being introduced into our water supply network:</p>

	<ul style="list-style-type: none"> • At the source or aquifer or through private bores. • Backflow (reverse flow) from houses or industry. • Damage to the pipes (eg. during excavation work or through vandalism, or asset failure). • Illegal access to water from fire hydrants. • Illegal connections to the water network. • Through pests and birds entering storage reservoirs.
Why use chlorine?	<p>Supplying safe and clean drinking water is a core responsibility of Council. The community expects this and Council has a legal requirement to provide water that is safe to drink for our residents and our visitors to Napier.</p> <p>We need to take into account the learnings from Havelock North to ensure that a similar event doesn't happen here.</p> <p>Drinking from an untreated water supply (without having one designed appropriately to be chlorine free) is like driving without a seatbelt. It is safe most of the time, but you need the seatbelt in the event of an emergency. Chlorine acts a little like a seatbelt.</p> <p>Chlorine has been proven to be the most effective treatment for water supply networks for two main reasons:</p> <ul style="list-style-type: none"> • It treats the water for pathogens (bugs). • It disinfects the pipes and reservoirs. <p>It is very likely that upcoming changes to the Drinking Water Standards will require a "disinfection residual" in New Zealand's water supplies. It may soon be mandatory that our supply system is chlorinated.</p>
How much chlorine is used?	<p>We use as little chlorine in our supply as we possibly can. Typically we like to keep the dosing rate between 0.4mg/L to 0.6mg/L, but dosing rate can be raised up to 0.8mg/L depending on the residual chlorine level in the pipe network. Currently we have differing levels of chlorine at each person's house, the aim is for a chlorine "residual" of above 0.2mg/L to combat any pathogens that get into the supply.</p>
Is Chlorine Safe?	<p>The chlorine used to disinfect our supply is added in very low doses. Chlorine has been used worldwide for over 120 years to keep millions of people safe. Some countries have been concerned about the potential health impacts of distribution by products. We test our network six monthly and have not detected distribution by products.</p>
Why can't we just switch the chlorine off?	<p>We have a moral and legal requirement to keep people safe and to meet current legislation. Part of these requirements</p>

	<p>involve developing a Water Safety Plan that identifies the risks in our supply and how we manage them. We have Chlorine as a way to manage the risks in our supply (mainly the risk of contamination in our network).</p> <p>If we switch the chlorine off with no change to the way that we manage risks we would be non-compliant and potentially be subject to enforcement action. But mostly, we want to keep people safe and will meet our legal requirements.</p>
<p>Why we aren't chlorine free yet and why does the review cost so much?</p>	<p>We have a review underway with a consultant to look at two main options for our community.</p> <ol style="list-style-type: none"> 1. Continuing with Chlorine free and upgrading our network, maintenance practices, risk management and monitoring etc with chlorine disinfection. Called "Status Quo Plus" 2. Providing a safe water supply without chlorine. <p>We will present the potential options for chlorine free to our Councillors before we choose a preferred chlorine free option to compare against the "Status Quo Plus" option. This will let us know what work we need to provide a safe, modern, compliant network with or without chlorine, what the changes will be to our capital plan, our maintenance work and the costs to do this and the time it will take to do the work.</p> <p>We have local and international experts looking at these options for us and they will work with the Council, and the Ministry of Health to provide the best options going forward.</p> <p>Moving to a safe, chlorine free network will take time and resources and both options will need a significant amount of investment.</p>
<p>What is causing Napier's dirty water?</p>	<p>Our water source, the Heretaunga Aquifer, has naturally occurring manganese - one of the most abundant metals in the earth's crust. When water with manganese water with oxygen or chlorine, the manganese oxidises to manganese dioxide, a black solid that can be deposited in our pipes.</p> <p>Manganese has always been present in our water network. Dirty water is now more of an issue due to the manganese reacting with the chlorine we've been adding to our water since 2017.</p> <p>In Napier, this affects certain suburbs (Tamatea, Onekawa and Pirimai) more than others because of different water pressure and flow rates, and because there are higher levels of manganese in the aquifer bores that supply these suburbs.</p>

<p>I don't like the taste of chlorine, what can I do?</p>	<p>A cheap and simple way to deal with this is to fill a jug of water and put it on your bench or in your fridge for a few hours. The chlorine will dissipate naturally. You can also get a bench top filter jug which is very affordable or get an under bench filter to help remove the taste of chlorine.</p> <p>For washing and showering, there are shower filters or full householder filters that can be purchased. Some examples are:</p> <ul style="list-style-type: none"> • www.mountainfresh.co.nz • www.pureflo.co.nz • www.aquafilterproducts.co.nz
<p>What do I do if my water is discoloured?</p>	<p>Open your outside tap until the water colour clears. If it doesn't clear after 15 minutes, phone our Customer Service Centre on (06) 835 7579. To help with water conservation, don't let the taps run for more than 15 minutes. Please call us if the water hasn't run clear after this time.</p> <p>If you do resolve the problem yourself, we'd really appreciate a heads up that you've had problems. Please complete the <u>'Report It' form</u>.</p> <p>If you experience a very strong chlorine smell, similar to a swimming pool, this generally indicates that the chlorine is doing its job, not that there is a really high level of chlorine in the water. We need to know if you have a really strong chlorine smell so that we can check it out.</p> <p>You can call us on our Customer Service Centre on (06) 835 7579 or complete the <u>'Report It' form</u>.</p>
<p>Is dirty water safe?</p>	<p>Napier's source water has a manganese level of less than 0.07 mg/L, well below the manganese Maximum Acceptable Value of 0.40 mg/L. This is safe to drink.</p> <p>The dirty tap water some households have been experiencing has higher levels of manganese and should not be drunk.</p>
<p>Dirty laundry. Any tips on how to avoid this?</p>	<p>If you've experienced dirty water issues in the past, we'd recommend you run your laundry tub taps first before you do your washing. If your water isn't running clear, then run your outside tap hard for up to 15 minutes. If things still look murky, then call our 24/7 Customer Service number - 0800 4 NAPIER - and we'll send our team out ASAP. To help with water conservation, don't let the taps run for more than 15 minutes. Please call us if the water hasn't run clear after this time.</p>

<p>What about Dechlorinated Water Stations?</p>	<p>The first dechlorinated water station, located on the south east corner of Anderson Park (York Ave side) opened in mid-2019. The water station has four taps and users aren't charged anything.</p> <p>A second dechlorinated water station located close to the city centre is being worked on.</p>
<p>What does the \$48 million water spend cover for 2020/21?</p>	<p>The expenditure for Three Waters covers all of the following costs: operations, maintenance, capital works including asset replacements. To keep our extensive Three Waters assets in good condition and to operate our systems with minimum interruptions and to meet regulations we need to invest a significant amount of money. We have been in the process of developing master plans for our systems and we are initiating a number of significant capital projects, particularly for future proofing our water supply.</p>