



Proposed national wastewater environmental performance standard

Discharge to land

The opportunity

Much of New Zealand's public wastewater infrastructure is 30 to 40 years old and needs to be upgraded or replaced.

To do this critical work, a resource consent is generally required. Approximately 60% of public wastewater treatment plants will need to renew a wastewater consent over the next decade. So, now is the time to establish nationally consistent standards to lift wastewater performance across the country and make consenting less complicated and costly.

At the moment, the wastewater consenting process is expensive and time consuming for the local councils that apply for consents, the regional councils that analyse applications and issue consents, and the communities that fund this essential infrastructure.

Based on case studies, it's estimated that councils could save up to 40% in consenting costs under the proposed standards – potentially saving them hundreds of thousands of dollars – while protecting the health of the public and the environment.

Focus on 'discharge to land' consents

Proposed standards cover the most common wastewater management activities, so that they're focused on the areas where they'll bring the biggest benefits.

There are currently 213 resource consents for discharge to land. Discharging treated wastewater to land is much more common for small treatment plants, as it ensures that the ecosystem can naturally break down wastewater as part of final treatment.

The proposed national standard for discharge to land gives local councils a common, practical approach to assessing if a site is suitable for discharging treated wastewater and establishes consistent treatment requirements when treated wastewater is discharged to land. It also sets consistent monitoring and reporting requirements.

This consistency gives wastewater network operators certainty about requirements. This helps to make it easier, faster and more cost-effective, for them to plan, design and operate wastewater infrastructure.

What this proposed standard covers

This proposed standard:

- requires a site-specific risk assessment that enables councils to determine at an early stage in the consenting process if land is suitable for discharging treated wastewater
- sets treatment requirements for key contaminants based on the risk classification of the land – this means councils can determine the likely cost
- sets requirements for monitoring to ensure treatment requirements are met, and reporting to regional councils, the public, and the Water Services Authority takes place
- requires a 35-year consent to be issued to help give local councils the certainty they need to do long-term wastewater management and investment planning.

Consistent monitoring and reporting requirements are also proposed as part of this standard. This would ensure that data is available to identify what's working and opportunities to improve.

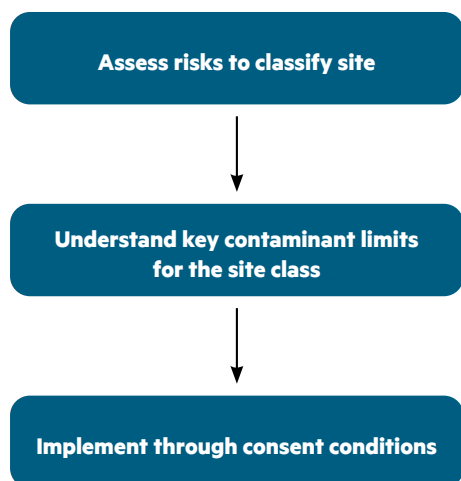
Proposed standards would only apply to public networks, which are primarily owned and operated by local councils. They do not apply to privately-owned wastewater treatment networks or septic tanks.



Water Services Authority
Taumata Arowai

taumataarowai.govt.nz

How this proposed standard works



First: Assess risks to classify a site where you're considering discharging treated wastewater

This standard proposes a three-step approach to analysing whether a specific site is appropriate for discharging treated wastewater:

	Step 1	Step 2	Step 3
Action	Baseline assessment	Assess public health, environmental and social risks	In-depth site assessment
What it considers	This initial assessment will consider how suitable the site is for discharging treated wastewater. This includes examining: geology and nearby groundwater, topography and size, and current or proposed land uses for the site.	Any risks to groundwater, recreation areas, food growing areas etc., posed by discharging treated wastewater at the site.	In-depth analysis of the characteristics of the land (via groundwater and soil assessments), how treated wastewater would be applied, and options for reducing any potential impacts of applying treated wastewater in that location.
Objective	Confirm whether a site is appropriate to progress to more detailed assessments in next steps.	Determine the risk category for the site. (There are four possible categories.)	Determine the 'site capability' category. (There are four possible categories.)

After these three steps are complete, the table below would be used to determine the 'class' of the site by finding the block that corresponds to a site's 'risk' and 'site capability' categories.

		Site Capability Category			
		1	2	3	4
Risk Category	1	Class 1	Class 1	Class 2	Class 3
	2	Class 1	Class 2	Class 2	Class 3
	3	Class 2	Class 2	Class 2	Class 3
	4	Class 2	Class 2	Class 3	Standards don't apply (Category 5)

Second: Understand key contaminant limits for the site class

Based on the 'class' of the land, tailored limits would apply for three key contaminants. This means that where there is lower environmental or public health risk, treatment requirements would also be lower, reducing the cost of wastewater treatment, while more sensitive environments would have greater treatment requirements.

Key contaminants are:

Contaminant	Why it was included
Total Phosphorus	Nitrogen and phosphorus are nutrients that help plants grow. If levels of these nutrients in water are too high, they can increase plant and/or algae growth, over time reducing water clarity and oxygen levels. This lack of oxygen can reduce the numbers of aquatic animals (e.g. shellfish and other invertebrates, as well as fish).
Total Nitrogen	In a scientific context, nitrogen can be measured in different ways. So can phosphorous. This proposed standard intentionally considers 'total nitrogen' and 'total phosphorus' so that it's clear that the measure includes all forms of nitrogen or phosphorous in treated wastewater. This makes measurement consistent and straightforward.
E. coli	<i>E. coli</i> is a type of bacteria commonly found in the intestines of warm-blooded animals, including humans. They're a useful indicator of whether bacteria, viruses or protozoa (single-celled parasites, like cryptosporidium and giardia) that can make people sick are present in soil and freshwater.

Proposed contaminant limits by class are:

Class	Total Nitrogen	Total Phosphorous	<i>E. coli</i>
	Kilogrammes that can be discharged per hectare each year (kg/ha/year)	Kilogrammes that can be discharged per hectare each year (kg/ha/year)	cfu*/100 millilitres
1	500	75	No limit
2	250	50	< 2,000
3	150	20	< 1,000

*cfu = 'colony forming unit'. It estimates the number of bacteria that have the potential to reproduce and increase overall levels of bacteria that could make people sick.

Third: Implement requirements through resource consent conditions

The requirements in this standard will be reflected in conditions in discharge to land consents. For the contaminants listed in this standard, the regional councils that regulate wastewater would not be able to require higher or lower levels of treatment.

The list above covers the most common contaminants that could have an impact on land. Those that aren't included may be less common or sufficient evidence is currently unavailable to inform limit setting. For contaminants that aren't covered by this proposed standard (e.g. PFAS or heavy metals like iron and aluminium) the existing resource management consenting process will apply.

We will develop guidance to support the implementation of all four standards.

Management and operation plan

As part of this proposed standard, all sites that discharge to land would be required to develop a management and operation plan. This could include:

- operations and maintenance procedures (e.g. when discharges can take place, how often inspections are required or desludging schedule)
- risk management planning
- environmental monitoring requirements.

We will develop guidance to support the implementation of all four standards.

Find out more, and have your say

Visit korero.taumataarowai.govt.nz/regulatory/wastewater-standards to find out more and provide feedback.

There you'll find:

- more resources like this
- the full consultation discussion document, which contains detailed information on what's proposed

- the technical reports and research that helped to inform proposed standards
- how to submit your feedback online, via email, or via post.

Consultation closes at **5pm on Thursday, 24 April 2025** (note that Friday 25 April is Anzac Day).

If you have questions about the proposed standards, please contact us at: korero@taumataarowai.govt.nz