# Help protect our special places by maintaining your septic tank

Aotea / Great Barrier Island septic tank guide



## Help protect our special places

Aotea / Great Barrier Island is a magical place thanks to its pristine natural beauty, remote tranquility, and stunning biodiversity, making it a haven for adventure and relaxation. But its remoteness also means that many homes have to rely on septic tanks to manage wastewater — and that can be a problem if those tanks aren't maintained properly.

Auckland Council is offering a financial discount to get wastewater systems checked and making it clear people with failing wastewater systems will be given time to repair them if needed.

Leaky and poorly maintained septic tanks allow germ laden wastewater into the natural environment, seeping into streams and then into our valuable coastal environment. On the island, that means these potentially dangerous germs collect in our slow moving watercourses and in the lagoons of our local beaches

Aotea / Great Barrier Island residents can ensure that their favourite spots are free of harmful germs, and are a safe playground for locals and visitors alike, by maintaining their septic tanks.



## How to get your Septic Tank Compliance Report Discount

Step 3 Step 1 Step 2 You need a Ask your Service Septic Tank service provider completes the about the report and discount shares it with available for you and the report council Step 5 Step 4 Step 6 You pay your Your service provider service invoices you provider on \$80 (for a their invoice council for primary (does not the balance include other of the or \$130 (for a services or report's cost secondary repairs)

The property owner will pay only \$80 for a primary system (e.g. a basic septic tank) or \$130 for an advanced system (e.g. a system with extra aeration and filter treatment) to the service provider. Council will cover the rest of the cost.

The incentive does not include any necessary repairs or pump-outs. These will be invoiced by the service provider to the customer as per normal processes.

The incentive is being funded from the water quality targeted rate.

## Faulty wastewater systems

Nuisances such as offensive odours, effluent seepage and other forms of environmental pollution caused by faulty on-site wastewater systems must be stopped as soon as possible.

If you notice any of these problems on your property or in your community please report them to Auckland Council on 09 301 0101 or on our website so that we can investigate.

You may also like to refer to the trouble shooting section of this booklet.

# Council requirements for fixing wastewater problems

When a wastewater nuisance is reported to the council the problem is investigated and where appropriate a notice is served on the owners requiring them to fix their system.

The timeframe in which the problem must be fixed varies depending on the type of problem, what action is required to rectify the situation, requirements for consents and the potential effect on the environment/public health if the problem is not fixed.

Regardless of the type of system you have on your property, it is your responsibility to ensure that your wastewater system operates to a safe and satisfactory standard.

#### **Aotea Island Safe Septic Tank Programme**

#### What are the new compliance standards?

We now need you to show that your system has been checked by a suitably qualified professional and is working. The service provider may identify issues that need to be resolved. If a wastewater system is not working properly or the property owner does not provide evidence of servicing, the system is not considered compliant.

#### What can you expect to pay for a compliance report?

The service cost depends on the system type and who does it. Council is offering a one-off financial incentive for residents to have their systems checked, available until 30 June 2025. The property owner will pay \$80 for a primary system (e.g. a basic septic tank) or \$130 for an advanced system (e.g. a system with extra aeration and filter treatment) to the service provider. Council will cover the rest of the cost. The incentive does not include any necessary repairs or pump-outs, and it is funded from the water quality targeted rate.

#### What happens if you can't afford it?

Our compliance team will work with you if there are major issues that will take time to repair, or the system needs replacing.

#### Wastewater system requirements

# What modifications to old primary treatment systems, e.g. outlet filter or drainage field, are expected?

We expect the property owner to make any repairs or improvements recommended to them by their service provider. Outlet filters are an option that can be added to a system to improve it. However, drainage fields are essential in all wastewater systems to disperse treated wastewater. We do not require modifications to your drainage field unless the system is non-functioning. If necessary, these would require building or resource consents. Every part of your wastewater system needs to be safely accessible for service providers.

#### What level of compliance is required for long drops?

We would expect these to have three-yearly checks with the aim to eventually replace them. However, drainage fields are essential in all wastewater systems to disperse treated wastewater. However, wastewater from showers, baths, kitchens, laundries, and basins also needs to be treated before being discharged. We do not recommend using wastewater directly from kitchens on gardens because of the organic food load.

#### Are compliance checks necessary for composting toilets?

You are required to have a building consent for a composting toilet as a permanent, fixed composting toilet is regarded as part of a building and must comply with the building code. If you construct an out-building (a separate structure to your dwelling) for the composting toilet, this too requires a consent because it contains sanitary facilities (and possibly plumbing too for washing hands). Composting toilets and their associated water discharge need 3-yearly compliance checks.

# Are primary systems with a trickle field still considered compliant compared to dose load?

Gravity-trickle fields are compliant and an excellent choice for Aotea Island because the other options use more power. What about historical systems with low quality soil drainage or design, such as heavy clays or poor trenches? These are often DIY and poorly designed. In addition, how the property is used will have changed over time. But we are not requiring you to replace your system unless the existing system is not working properly.

What about systems located close to waterways? Normally we expect the disposal field to be 15m from a waterway, but this is a guideline and depends on the treatment type and site. If it is close to the waterway, we expect a higher level of treatment (secondary or tertiary). Unfortunately, we know this is not practical in many places. That is a real concern on Aotea Island because there are people using streams for their drinking water.

#### Who can service wastewater systems

# What qualifications/tickets are required to service/inspect a system?

Local service providers are Barrier Drainage (Jono) and Aotea Maintenance (Josh), they both have a range of training on various systems and are listed on our website. However, we recommend that a secondary or tertiary system is serviced by a company trained by the manufacturer.

#### Can the homeowner self-service their wastewater system?

There may be elements that can be self-serviced such as cleaning filters or flushing disposal valves, but this still needs to be guided by the service person or manufacturer. However, Compliance will not accept full self-servicing for these reasons:

- Health and safety risks for exposure to biohazards and confined spaces in the tank.
- The homeowner may want to say that their system is fine when there may be issues.
- Secondary systems have parts that need expert experience to understand the entire system.

# What legal rights does the Council have to conduct inspections on private property?

Auckland Council does not inspect the system itself. We check that the service records for systems are lodged, and that repairs are undertaken. However, we do have the legal right to enter a property if needed to check a system. In such cases we do all we can to advise the resident/owner before visiting.

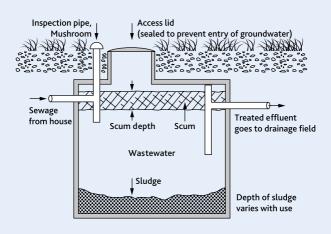
## Standard septic tanks

A septic tank works by separating wastewater into three layers:

- scum (which floats on the surface)
- liquid (middle layer)
- solids/sludge (which sink to the bottom of the tank).

The liquid layer is treated in the tank, reducing bacteria and nutrients. The liquid is then distributed into the disposal field where it can soak into the ground. Sludge and excess scum are pumped out of your tank every three years by a council contractor.

Because a septic tank system relies on soakage, the soil type on your property is very important. Some soils such as clay, do not allow the wastewater to drain away rapidly enough. Groundwater levels can also have an effect on soakage.



## High-tech treatment systems

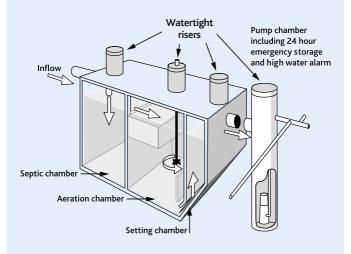
High tech treatment systems are designed to treat wastewater to a higher quality than that of a standard septic tank. They are usually made up of several chambers. Each chamber has a specific function (such as aeration) to enhance the treatment of wastewater before it passes into the disposal field.

The treated wastewater is often then filtered through a sand or textile filter system to further improve quality.

Because of the high level of treatment, disposal can occur near the soil surface (often via a dripper line) where more evaporation and transpiration of the wastewater by grass and plants can occur.

Although high-tech systems require regular maintenance and servicing they are superior to standard septic tanks and are a good replacement option.

You should have a maintenance contract in place with an experienced technician or contractor. The system must also comply with any resource consent or building requirements.



## Alternative household cleaning products

The following table details some alternatives to household chemicals to help reduce the impact on your septic tank. If you do use chemicals, please keep these to a minimum as they kill the bacteria that breaks down your waste.

Application	Product	Use
All-purpose cleaner	Baking soda	Apply to a damp cloth to clean surfaces in the kitchen and bathroom.
Toilet cleaner	Borax and lemon juice	Make a paste from borax and lemon juice for cleaning toilet bowls.
Grout and mildew cleaner	White vinegar	Dip an old toothbrush in white vinegar and scrub the tile grout to remove mildew and mould.
Dishwashing detergent	Pure soap; baking soda; vinegar	Use liquid or powdered pure soap and vinegar for washing dishes in your sink. When using your dishwasher, try baking soda in the soap powder compartment and vinegar in the rinse aid dispenser.
Pot cleaner	Baking soda	To remove burnt-on food, cover the burnt area with water, add two teaspoons of baking soda and bring to the boil. Leave to cool and scrape off.
Bleach	Lemon juice	Use one cup of lemon juice in half a bucket of water and soak overnight.
Stain remover	Eucalyptus oil	Apply a few drops to the stain and let it evaporate before washing.
Laundry detergent	Low chemical detergents	Choose a detergent with zero phosphate and chlorine content, and the lowest sodium level.

Note: borax is available from most pharmacies and eucalyptus oil from most health stores.

## **Trouble shooting**

The following information should assist you in preventing common problems. To report problems or get additional information please contact Auckland Council on 09 301 0101 or visit our website.



## Common problem

Overflow of wastewater from tank or gully trap (often associated with strong odour around tank)

#### Possible causes:

- solids from tank blocking pipes or disposal field drains
- damage to disposal field resulting from plant/tree roots or heavy vehicles/stock
- tank overloading
- · poor drainage due to soil conditions
- · foreign objects.

#### What can you do to prevent the problem?

- Ensure your tank is pumped out at least every three years by the council contractor.
- Fit a septic tank outlet filter to prevent solids entering the disposal field.
- Plant only small plants on your disposal field.
- Reduce the amount of water you use in the house.
- Repair or replace broken septic tank lids.
- Ensure your gully trap grate is sealed so solid objects (e.g. children's toys) are not able to enter the drain.
- Scrape all dishes into a bin before washing to remove grease and food scraps.
- Keep vehicles and large animals off the disposal field.
- Don't allow roof water to discharge into your tank.

## Common problem

Stormwater ponding on surface of disposal field (often very little or no odour)

#### Possible causes:

- lack of or an inadequate stormwater drainage system
- poor drainage due to soil conditions.

#### What can you do to prevent the problem?

- Divert all stormwater away from the disposal field by digging new drains or redirecting existing drains.
- Plant small, water-tolerant plants (not food crops) on and around the disposal field to absorb water.
- Use shallow rooted/broad leaf plants around disposal field.

## Common problem

Strong odour coming from tank or disposal field with no visible signs of problems

#### Possible causes:

 Bacteria in the tank being killed by the addition of chemicals or other substances, which means your wastewater is not being treated properly.

#### What can you do to prevent the problem?

- Use biodegradable products suitable for onsite wastewater systems (refer to the guide for alternative products included in this booklet.
- Minimise the use of chemicals including shampoo and household cleaners.



## Common problem

Wastewater ponding on surface of disposal field (often associated with strong odour around disposal field)

#### Possible causes:

- · overloading of wastewater system
- disposal field too small
- disposal field clogged with solids, scum or unsuitable materials
- poor drainage due to soil conditions.

#### What can you do to prevent the problem?

- Reduce the amount of wastewater created.
- · Ensure leaky taps are fixed immediately.
- Make sure the washing machine and dishwasher are full before using.
- Use a front-loading washing machine to minimise water usage.
- Don't use a waste disposal unit in the kitchen sink.
- Don't flush materials such as sanitary pads, disposable nappies and rags.
- Install a distribution box to allow parts of the disposal field to be 'rested'.
- Fit a septic tank outlet filter to prevent solids entering the disposal field.
- Talk to an expert regarding system improvements.



# Prevent these substances from entering your tank:

- harsh cleaners such as chemical bleaches
- nappy cleaner
- antibacterial soap/cleaners
- · oils, fats and grease
- chlorine
- · paints
- medicines
- pesticides
- food scraps
- coffee grounds
- tea bags
- sanitary products
- · cleaning wipes/rags
- · nappies.

#### ▶ Find out more: phone 09 301 0101 or visit aucklandcouncil.govt.nz

