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Help protect our special places by maintaining your septic tank or high-tech on-site wastewater systems

A homeowner's guide

Auckland Council
Te Kaunihera o Tāmaki Makaurau

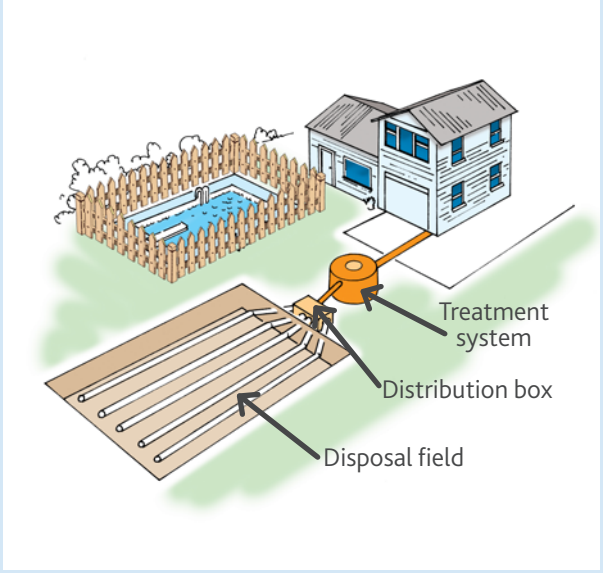
Help protect our special places

Auckland's many beaches, rivers and streams are special places. To protect these areas, septic tank, high-tech, and other on-site wastewater systems need to be operated and maintained correctly.

Leaky and poorly maintained septic tanks, high-tech, and other on-site wastewater systems allow germ laden wastewater into the natural environment, seeping into streams and then into our valuable coastal environment. They can also cause health risks to people on the property as well as neighbours. Wastewater is water we have used and sent down the toilet and other drains.

By regularly maintaining their on-site wastewater systems such as septic tanks and high-tech systems, homeowners can ensure that their properties, neighbourhood and favourite waterways are free of harmful germs, and are a safe playground for Aucklanders and visitors.

This brochure gives advice on understanding what on-site wastewater systems like septic tanks and high-tech systems are and how they can be maintained to help keep our properties and environment safe.



Faulty on-site 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 have noticed any of these problems on your property...

Refer to the trouble shooting section of this booklet and check with your specialist maintenance contractor to see if your system needs servicing.

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.

If you notice any of these problems in your community...

Report them to Auckland Council on 09 301 0101 or on our website so that we can investigate. 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.

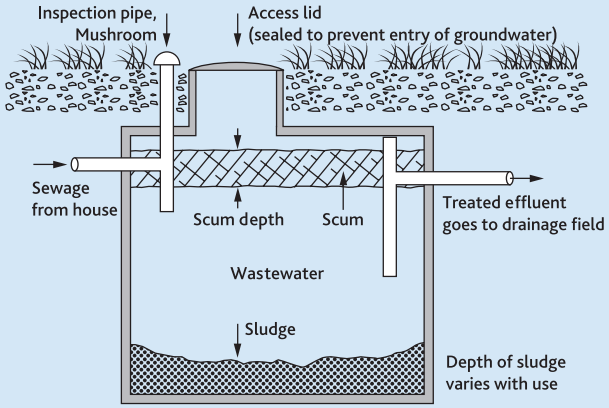
What is a standard septic tank?

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 need to be pumped out of your tank every three years so please diarise to arrange a private 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.



What are high-tech treatment systems?

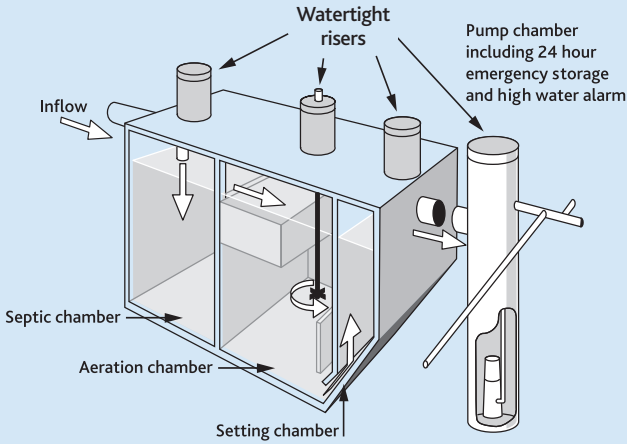
High-tech treatment systems are designed to treat wastewater to a higher quality than that of a standard septic tank. They are usually made up of several chambers. Each chamber has a specific function (such as aeration) to enhance the treatment of wastewater before it passes into the disposal field.

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.



Trouble shooting

The following information should assist you in preventing common problems. If you still have problems or questions, contact your specialist maintenance contractor.

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?

- If you have a septic tank, ensure your tank is pumped out at least every three years.
- 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.
- Increase in the number of people using the household, which overloads the bacteria in the system.

What can you do to prevent the problem?

- Use biodegradable products suitable for on-site wastewater systems (refer to the guide for alternative products included in this booklet.
- Minimise the use of chemicals including shampoo and household cleaners.
- Reduce the amount of water you use in the house.

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.

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.

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**

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