Help protect our special places by maintaining your septic tank

A septic tank guide
Help protect our special places

Rural Auckland is a special place, but the 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. Wastewater is water we have used and sent down the toilet and other drains.

Leaky and poorly maintained septic tanks allow germ laden wastewater into the natural environment, seeping into streams and then into our valuable coastal environment.

Residents can ensure that their favourite spots are free of harmful germs, and are a safe playground for Aucklanders and visitors alike by regularly maintaining their septic tanks.

Owners of septic tanks can get advice and support from Auckland Council to help keep our environment safe.
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.
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 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.
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.
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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Product</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-purpose cleaner</td>
<td>Baking soda</td>
<td>Apply to a damp cloth to clean surfaces in the kitchen and bathroom.</td>
</tr>
<tr>
<td>Toilet cleaner</td>
<td>Borax and lemon juice</td>
<td>Make a paste from borax and lemon juice for cleaning toilet bowls.</td>
</tr>
<tr>
<td>Grout and mildew</td>
<td>White vinegar</td>
<td>Dip an old toothbrush in white vinegar and scrub the tile grout to remove mildew and mould.</td>
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<td>Dishwashing detergent</td>
<td>Pure soap; baking soda; vinegar</td>
<td>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.</td>
</tr>
<tr>
<td>Pot cleaner</td>
<td>Baking soda</td>
<td>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.</td>
</tr>
<tr>
<td>Bleach</td>
<td>Lemon juice</td>
<td>Use one cup of lemon juice in half a bucket of water and soak overnight.</td>
</tr>
<tr>
<td>Stain remover</td>
<td>Eucalyptus oil</td>
<td>Apply a few drops to the stain and let it evaporate before washing.</td>
</tr>
<tr>
<td>Laundry detergent</td>
<td>Low chemical detergents</td>
<td>Choose a detergent with zero phosphate and chlorine content, and the lowest sodium level.</td>
</tr>
</tbody>
</table>

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.
• 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 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.
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.

Common problem

Wastewater ponding on surface of disposal field (often associated with strong odour around disposal field)
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 www.aucklandcouncil.govt.nz