



This brochure was prepared by the
WELLINGTON REGIONAL COUNCIL
with the support of the organisations above.
September 2000



www.wrc.govt.nz

Sewage
HELP series

Other brochures in this series

- * On-site sewage – your responsibilities
- * What's going on in your sewage system

Want to know more? These are the people to ask..

KAPITI COAST DISTRICT COUNCIL	
Environmental Protection	04 298 5139
PORIRUA CITY COUNCIL	
Environment and Regulatory Services.....	04 237 5089
WELLINGTON CITY COUNCIL	
Environment Control	
Business Unit	04 499 4444
HUTT CITY COUNCIL	
The Approvals Team	04 570 6666
UPPER HUTT CITY COUNCIL	
Technical Services Unit	04 527 2170
SOUTH WAIRARAPA DISTRICT COUNCIL	
Plumbing & Drainage	06 306 9611
CARTERTON DISTRICT COUNCIL	
Building Department	06 379 6626
MASTERTON DISTRICT COUNCIL	
Environmental Health	06 378 9666
WELLINGTON REGIONAL COUNCIL	
Consents Help Desk	04 384 5708
Wairarapa	06 378 2484



Check the inside of this brochure for your 4 helpful hints

On-site sewage systems are an ongoing commitment

Broken tanks and blocked soakage treatment areas can result in sewage backing up into the house and smelly boggy areas in your backyard. This can be messy and expensive to fix. A well designed, well maintained system should last thirty or forty years. Don't cut its life short by not looking after it.



! Money spent on a good system is money down the drain if you don't look after it.

Good plants to plant around the soakage treatment area

The soakage treatment area doesn't have to be an "out of bounds" area that takes up space on your section. There are lots of lovely plants that you can plant around it. Just remember that you need to be able to get to it if it ever clogs up or starts leaking out the side (which it shouldn't do if it's properly designed and looked after!)

For the best effluent treatment, the soil around the area shouldn't be very wet, but from time to time it will be. Plants that don't mind moist or wet conditions are best. The plants listed here are suited to moist or wet areas anywhere in the Wellington Region. All of them are natives.

Native shrubs suited to moist or wet areas

Karamu, bush snowberry, twiggy tree daisy, marsh ribbonwood, rangiora, small leaved mahoe, swamp caprosma. These shrubs shouldn't be planted too close to the distribution pipes because they can grow quite big and their roots might end up blocking the holes in the pipes.

Native ferns suited to moist or wet areas

Black tree fern, gully fern, soft tree fern, kiokio, Prince of Wales feather, single crepe fern, swamp kiokio, wheki ponga.

Native grasses, sedges, rushes and other plants suited to moist or wet areas

Bog rush, cutty grass, giant umbrella sedge, Glen Murray tussock, three-square sedge, jointed wire rush, knobby clubrush, lake clubrush, raupo, red tussock, sea rush, summer-flowering toetoe, swamp flax.

Best planted in groups, red tussock is one of our most handsome grasses. It needs full sun and a reasonably moist site to develop its colour fully. You could plant them around your trenches to separate your soakage area from your lawns or gardens.

Make sure your soakage treatment area isn't too close to any trees. Tree roots can get tangled up around the pipes. Big trees can make the area very shady and shelter it from wind which isn't good because sun and wind are good for treatment.

The nutrients in the effluent can make weeds grow. To avoid weeds, sow grass seeds as soon as construction has finished.

! Check the *Wellington Regional Native Plant Guide* (Wellington Regional Council), and *Growing Native Plants in Kapiti* (Kapiti Coast District Council), for more information about native species suitable for your area.

1 Keep the good bacteria in the tank alive

Bacteria break down most of the solid stuff in the sewage and turn it into sludge. Without them, solid stuff would quickly fill the tank. The "good" bacteria can be killed by household cleaners, strong detergents, and toxic chemicals.

To keep them alive –

✓ Do

- Do use bio-degradeable detergents and cleaners
- Do check your detergents and cleaners to see if they are suitable for use with septic tanks

X Don't

- Don't pour toxic chemicals like paints, thinners, oils, or pesticides down the drain
- Don't use huge amounts of cleaners

2 Reduce the liquid load into the tank

Wastewater from the washing machine and bathroom make up most of the load into the tank. Reducing this load helps the final treatment in the soil because the soil under the soakage treatment area doesn't get so wet. This is good because drier soils give better treatment. Another thing is, small loads take up less space in the tank, so they don't pass through so quickly. This gives the solids in the sewage more time to settle to the bottom, rather than escaping out of the tank and blocking up the soakage treatment area.

Ways to reduce the amount of sewage going into the tank –

✓ Do

- Do fix leaking taps
- Do have showers instead of baths
- Do install water reduction devices such as dual-flush toilets, low-flow shower heads, spray nozzle taps etc

X Don't

- Don't do all your laundry on one day
- Don't empty large volumes of water into the system from spa pools and so on
- Don't let rainwater into the tank, either from the roof or from the surrounding land

General Tip

You can lower your water use by putting a brick or a water filled plastic bottle in the toilet cistern. This reduces the amount of water used for every flush. See your district council for information about water reduction devices.

3 Reduce the solid load on the tank

Most solid stuff in the sewage settles on the bottom of the tank where it's broken down by bacteria. The end product is a liquid sludge at the bottom of the tank. Some things don't break down. They'll stay in the tank until you get it emptied.

It's your choice. You can be relaxed about what goes in and get the sludge removed every year, or you can reduce the sludge build up and get it removed every two or three years.

If you want to reduce sludge build up –

✓ Do

- Do scrape all your dishes to remove fats and food particles before washing
- Do shake sand and dirt from clothes before you wash them

X Don't

- Don't use a kitchen sink waste disposal unit
- Don't put coffee grounds, sanitary napkins, disposable nappies etc into the system

Whatever approach you take, sludge will build up and you must remove it long before it gets near the outlet pipe. If you don't, sludge will overflow into the soakage treatment area and block it up. Once the soakage area gets blocked you have to get a new one constructed somewhere else on the property, or dig up the whole area and bring new soil in.

General Tip

Put rubbish in the rubbish bin, not down the toilet.

Things like dental floss and sticking plasters can float through the tank and block the holes in the distribution pipes in the soakage treatment area.

4 Protect your soakage treatment area

The soakage treatment area is where the sewage goes when it leaves the tank. It is the key to the safe disposal of effluent. Effluent from the tank still contains lots of germs. These germs don't disappear when the effluent soaks out of sight.

Germs survive best in wet conditions, so don't give them wet conditions! Keep the soakage treatment area as dry as possible by distributing the effluent at a low rate throughout the entire area. Don't let it all discharge beside the tank because this can create a permanently wet area where the germs will thrive.

Marking where the pipes are laid is helpful when you want to plant trees, or change the system or find damaged pipes later. Having mushroom vents at the ends of the distribution lines is a good way of doing this, and gives you a way to check if the effluent is building up anywhere.

To protect the soakage treatment area and help it last –

✓ Do

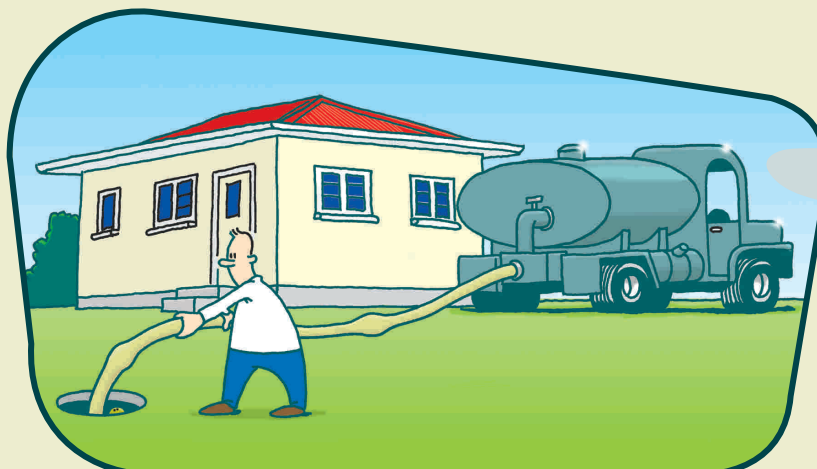
- Do maintain and protect all plants, lawns and landscaping that are part of the soakage area
- Do plant borders or low hedges around it to separate it from the rest of the property
- Do keep animals off it because they can damage distribution pipes and compact the soil
- Do swap between two areas every three to six months (if it was designed for alternating loading and resting between separate soakage areas)

X Don't

- Don't build driveways or buildings on top of the soakage area, or drive over it
- Don't grow deep rooting trees or shrubs over the soakage area
- Don't let rainwater flow onto the soakage area from roofs, driveways, or uphill areas
- Don't let effluent collect on the ground surface (if this is happening, the soakage area is blocking up and needs to be fixed quickly)

General Tip

Divert all surface water away from the soakage treatment area.



! Even if you're careful about what goes into the tank, you should get the sludge removed at least every three years.