

SEPTIC TANKS – WHAT ARE THEY?

A septic tank is an example of an on-site sewage treatment device used to treat sewage in unsewered areas. Partial treatment occurs in the septic tank prior to liquid effluent passing into an absorption trench for further dispersion into the soil.

HOW DO THEY WORK?

Wastewater generated from households is collected and stored in the septic tank. Wastewater enters through the inlet junction whereby anaerobic digestion and breakdown of the waste begins. Your septic tank is a living ecosystem containing bacteria and micro-organisms, which digest the solid waste and help treat the water.

Sewage forms 3 layers within the septic tank: light solids float to form a scum layer on top; heavy solids sink to the bottom forming a sludge layer; and a clear liquid effluent layer between the sludge and scum layers. Refer to the cross section diagram over the page.

As the septic tank fills, the clear liquid effluent passes through the outlet junction to the absorption trench. At this stage the partially treated effluent contains large amounts of dissolved pollutants (nitrogen and phosphorus compounds), and disease causing pathogens (viruses, bacteria and worms).

In the absorption trench, natural soil bacteria, which are encouraged by oxygen, aid in breaking down some of the pollutants and pathogens. Effluent water is absorbed into the soil, utilised by plants and partly evaporated by the sun.

Please note that failure to have a current Approval to Operate, or operating your septic system in a manner that poses serious risk to public health and the environment will result in the issuing of fines or notices (*Local Government Act 1993; Protection of the Environment Operations Act 1997*)

CONTACTING COUNCIL

Telephone: 4677 1100

For emergency enquiries please call the above number 24 hours.

Environmental Health Officer: 4677 1196

Facsimile: 4677 2339

Office hours: 8:00am-4:00pm

Phone enquiries: 8:00am-4:30pm

Administration Centre

PO Box 21
62-64 Menangle Street
PICTON NSW 2571
DX 26052 Picton
council@wollondilly.nsw.gov.au

Rural Living

www.wollondilly.nsw.gov.au

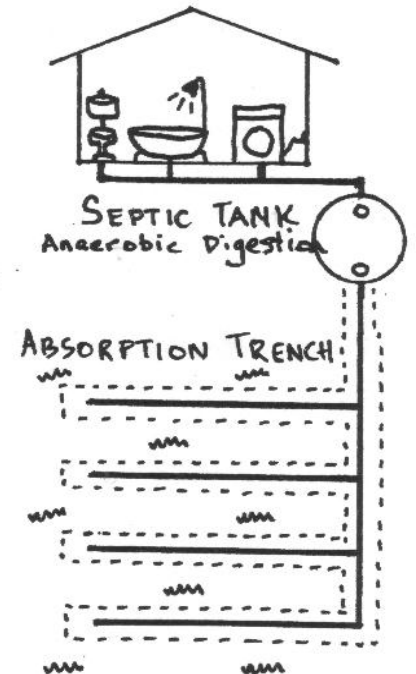
OTHER CONTACTS

If you are experiencing problems with the operation of your septic tank and absorption trenches, look under the following headings in the yellow pages section of your phone book:

- Licensed Plumbers
- Septic system - servicing, manufacture and installation



KNOWING YOUR SEPTIC TANK & ABSORPTION TRENCH ON-SITE SEWAGE TREATMENT SYSTEM



COUNCIL REGULATION

Operators of septic sewage management systems are required to apply to their local Council for an **Approval to Operate**. These are granted for periods of 1, 3 or 5 years dependent the risk systems pose to public health and the environment.

MAINTENANCE

Septic tanks need to be de-sludged (pumped-out) every 3-5 years to avoid the build up of solids in the tank. Failure to de-sludge will result in solids entering the absorption trench, one of the primary causes for system failure.

Do ✓

- ✓ Apply to your local Council for an Approval to Operate.
- ✓ Learn the location and layout of your septic system.
- ✓ Have septic tanks de-sludged (pumped out) every 3-5 years dependent on usage and capacity of tank(s).
- ✓ Use biodegradable detergents that are low in phosphorus and nitrogen.
- ✓ Plant grasses, small trees and shrubs downslope of the absorption trench to aid in absorbing effluent water. Water loving and shallow rooted plants are best. Contact Council for a list of suitable natives.
- ✓ Conserve water in the home to avoid overloading your septic system.
- ✓ Use sink strainers in the kitchen to avoid unnecessary solids entering the septic.

- ✓ Annual checks by approved contractors looking at scum and sludge levels, and for the presence of blockages, will increase the longevity of your septic.
- ✓ Build a small earth diversion bank up slope of the absorption trench approximately 15cm high to divert stormwater away from the area.

Do NOT ✗

- ✗ Use cleaning agents that contain bleach, disinfectant, nitrogen, phosphorus, and caustic soda.
- ✗ Discard pesticides, herbicides, or antibiotics into the septic.
- ✗ Allow foreign objects such as sanitary napkins, nappies, condoms and other hygiene products to enter the septic.
- ✗ Intentionally divert effluent water off your property in waterbodies, street gutters or the stormwater system.
- ✗ Let children or pets play in the absorption trench area.
- ✗ Avoid soil compaction in the absorption trench area from machinery or animals.
- ✗ Build structures or plant trees that will shade the absorption trench. Sunlight aids in effluent breakdown. Small trees should be planted >5m, and large trees >20m away from the absorption trench.
- ✗ Store loads of soil or other materials on the absorption trench.
- ✗ Flood the area with sprinklers and/or hoses.
- ✗ Place additional topsoil on the surface of the absorption trench.

IS YOUR SEPTIC HEALTHY?

You may have a problem with the operation of your septic tank and absorption trench on-site sewage management facility if you note any of the following to occur:

- There is a strong effluent odour emanating from the septic tank, or absorption trench.
- The absorption trench is damp or soggy, or effluent water is noted to be pooling on the soil surface.
- Exuberant grass and weeds noted to be growing around the absorption trench.
- Drains and toilets take time to clear, and/or water backing up in showers and toilets.
- Wastewater is noted to be moving off your property into adjoining allotments.
- The septic tank has not been de-sludged in 3-5 years.
- There are cracks in the septic tank, inlet and/or outlet junctions.

CROSS SECTION OF A SEPTIC TANK

