

## Septic Tank- Fact Sheet

### How to reduce your septic's impact on the environment

#### Septic Systems

In unsewered areas, the proper treatment and re-use of household wastewater on-site is critical in ensuring minimal impact to public health and the environment. Septic systems have been developed as a way of achieving this.

#### What is a septic system?

A septic system consists of septic tank combined a soil absorption system and/or transpiration beds or pump out connections. The system enables people living in unsewered areas to treat and disperse their sewerage.

A septic tank is a structurally sound watertight tank used for the treatment of sewage and liquid wastes from a single household or multiple dwellings.

#### How does a septic system work?

All the wastewater from a household enters the tank. Most solids settle to the bottom and are retained in the tank, forming a sludge layer, whilst fats and greases collect at the top in a scum layer

Bacteria in septic tanks break down the solid matter in scum and sludge layers. Material that cannot be fully broken down gradually builds up in the tank and must be pumped out periodically.

#### There are 3 ways to handle septic tank effluent:

##### **On-Site Application**

The effluent flows from the septic tank to transpiration and/or absorption trenches. Here effluent is mainly absorbed into the soil and partly evaporated by the sun and used by vegetation

Note: Such application systems have the potential to contaminate groundwater and are not recommended in higher density developments. Further treatment followed by subsurface irrigation should be considered.

##### **Pump out**

The effluent flows from the septic tank into a collection well or holding tank. At regular periods, a tanker pumps out the holding tank and transports the effluent to an off-site facility.

##### **Common Effluent System (CES)**

The treated wastewater is transported to an off-site management facility through a network of small diameter pipes.

#### Regulations and Recommendations

An on-site septic system requires approval from the local council before it is put in place. The regulations that apply to single household systems differ from those for multiple dwellings.

The Environment Protection Authority (EPA) is responsible for approving septic tanks used to treat waste generated by larger multiple dwellings eg. Caravan Parks. The NSW department of health determines the design and structural requirements for septic tanks and collection wells.

Local Council's have the authority to approve systems certified by the NSW Department of Health for individual properties and ensure the systems do not impact on public or on the environmental health of the area.

Council is responsible for ensuring the system is installed to its specifications and conditions as well as being properly maintained. You should contact council if you are unsure which regulations apply to your system.

### Maintaining your Septic system

The effectiveness of the system will in part depend on how it is operated and maintained.

The following is a guide on how to achieve the most from your system:

#### **DO**

- Have your septic tank de-sludge ever 3 years to prevent clogging
- Have your septic system serviced annually by a licensed contractor
- Have your grease trapped (if installed) emptied every 2 months
- Keep records of pumping, inspections and services
- Learn the location and layout of your septic system
- Check household products for suitability for use with a septic tank.
- Use biodegradable liquid detergents. Such as concentrates low in Phosphorous.
- Ensure you mosquito proof your septic tank
- Conserve water

#### **DON'T**

- Put large amounts of bleach, disinfectants, whiteners, nappy soakers down your sink or toilet
- Put fats and oils down the drain
- Install and use garbage grinder or spa bath if your system isn't designed for one
- Flush nappies, condoms or other foreign matter down toilets
- Use more detergents than recommended by the manufacture
- Have several showers and do multiply loads of washing in a short pace of time as this may overwhelm the system and cause untreated sewerage to backup.

### **Warning Signs**

You can look out for a few warning signs that signal to you there is trouble with your septic tank. Ensure that these problems are attended to immediately to protect your health and the environment.

Look out for the following signs

- Water drains away too slowly
- Sewage smells- This suggests a serious problem
- Water backing up into sink suggesting system is failing
- Wastewater surfacing over land application area

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Remember to always call a technician in case of a system failure to limit or stop health risks and pollution.

Poorly maintained septic tanks are serious source of water pollution and may present health risks cause odour and attract pests.

By monitoring and having your septic tank maintained you can do your part in helping protect the environment as well as the health of you and your family.