



Fact Sheet

On-site Wastewater Management

Septic Systems

Septic systems treat wastewater to a primary or basic level only. The resultant effluent **MUST** be discharged below ground to enable further processing in the soil.

Modern septic systems generally comprise of an all-waste septic tank and underground disposal area. All household wastewater, including the toilet, kitchen, bathroom and laundry is directed into the septic tank.

Prior to 1998 Septic Split Systems were also used, where blackwater (toilet wastewater) was directed to a septic tank with greywater (all other household wastewater) directed to a separate tank. Due to health and safety reasons, the use of greywater in Queensland was restricted and traditional split systems are no longer used.

As the wastewater passes through the tank, helpful bacteria begin to breakdown the remaining organic matter. At this stage the effluent still contains harmful viruses and bacteria that must be discharged below ground where the natural soil processes continue to treat the effluent.

Effluent disposal

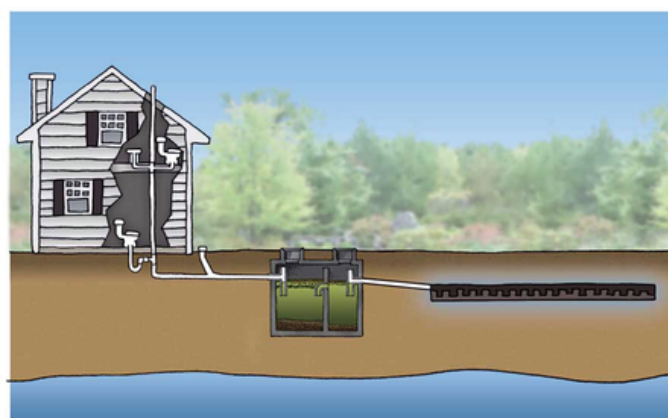
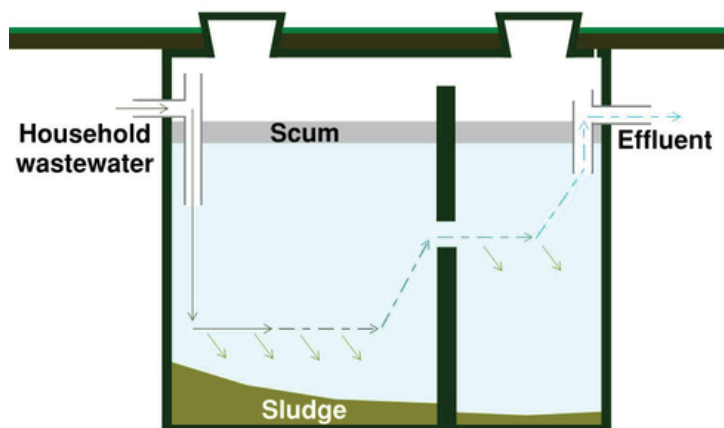
Below ground disposal will generally be in one of the following forms:

Standard soakage bed – a series of pipes laid in gravel lined trenches that allow effluent to drain and disperse through the soil below. The area above will generally be covered with grass or other approved plants.

Inside your Septic Tank

As wastewater enters the septic tank the liquid velocity is reduced allowing time for the wastewater to separate into layers.

Lighter solids, fats and oils will float to the surface creating a scum layer which also prevents odours escaping. Heavy solids sink to form a sludge layer. It is this scum and sludge that will need to be removed (pumped out) approximately every 3-5 years,



Evapotranspiration beds – suitable for localities where evaporation and transpiration rates exceed rainfall. Effluent flows through a series of perforated pipes into a lined gravel bed covered with soil and grass. The water is removed by evaporation and transpiration through the grass.

Mound system – used where the natural soil conditions are inadequate to process effluent. From the septic tank effluent is passed through a dosing chamber where it is distributed to a soil/sand mound in metered doses. Effluent is treated as it moves through the mound before the final treatment in the natural soil below.



Council Approval

Council approval is required prior to initial installation and any alterations to ensure compliance with relevant legislation and wastewater codes is maintained.

The owner is responsible for ensuring approval conditions, such as boundary and building clearances, fencing or disposal area constraints and ground coverings, are adhered to at all times and the system is maintained in good working order.

Poorly maintained septic systems can impact public health, attract pests or pollute groundwater, streams and waterways. Any damage to, or caused by, a failing septic system is the responsibility of the owner.

Maintenance obligations

To ensure the health and proper function of your system it is recommended that you:

- Have the system inspected every 12 months by a licensed plumber or service agent to look for signs of excessive sludge or system failure.
- Have accumulated sludge and scum removed by a professional plumbing contractor every 3-5 years.
- Keep the grass within the disposal area mowed and maintain surrounding plants to avoid shading.
- If a kitchen wastewater grease trap has been installed, monitor any build up and clean out as required.



General usage and care tips

Certain products, chemicals and foreign matter may affect the balance of helpful bacteria within your septic tank or cause blockages. To get the best out of your system, follow these general usage and care tips:

- Only use biodegradable products (e.g. cleaning products and toilet paper) and avoid chemicals like ammonia, disinfectants, bleach or pesticide.
- Prevent items like baby wipes, hygiene products, bones, glass or coffee granules from entering the system.
- Don't pour oil or fats down the sink and use strainers or colanders to trap food scraps.
- Use water saving devices and stagger the discharge from washing machines, baths etc. Excessive water may temporarily overload the facility.
- Protect the disposal area from vehicles and don't use the disposal area for personal recreation, growing of edible plants or containment of pets.

Signs of an unhealthy septic system

Early detection of system faults will ensure appropriate steps can be taken to prevent system failure. The following signs may indicate your septic system needs attention.

- Toilets and drains become slow draining and/or wastewater is regularly backing up.
- The air near the septic tank or disposal area has an unusually bad smell, like that of rotten eggs.
- Water is pooling within or near the disposal area.
- The disposal area has poor vegetation growth or an unusual amount of dark green grass

Further information

Refer to the Plumbing page on Councils website for further information and useful links