



On-site Sewage Facilities Fact Sheet

All properties that are not connected to a Council sewer system have to treat the wastewater on the property and to do this, use on-site sewage facilities.

What is an on-site sewage facility (OSSF)?

On-site sewage facilities are basically a mini sewerage treatment plant in your backyard. An on-site sewage facility consists of two basic parts; a treatment facility to treat the wastewater and a land application area to dispose of the wastewater within the boundary of the property.

Property owners have a responsibility to ensure that they are working properly to protect both the health of their family, the community and also the health of the environment.

Are there different types of on-site sewage facilities?

There is a range of OSSFs to meet the different needs of site specific conditions. Selection requires careful consideration by experienced wastewater consultants and/or licensed plumber and drainer/s. All systems have limits so it is important to select a system that will cope with the expected volume of wastewater and one that is suited to the location.



Council approval is required before installation and operation of an OSSF such as:

- **aerated wastewater sewage treatment plants -**

which uses mechanical, biological and filtration methods to treat waste before discharging through either above or below-ground irrigation systems;

- **aerobic sand filter system -**
which filter the wastewater through layers of sand and gravel providing natural aeration and biological oxidation through aerobic and nitrifying organisms;
- **septic tanks (primary treatment) -**
which breaks down the wastewater consisting of toilet waste and grey water using micro-organisms, into a scum layer a sludge layer and the liquid supernatant;
- **composting dry vault system -**
this is a process of biological degradation to convert nightsoil into a humus-like substance through the aerobic action of micro-organisms and invertebrates; and/or
- **greywater treatment/diversion facility -**
which impacts the wastewater generated from baths, showers, washbasins and laundries. This water can be diverted for use on lawns and gardens.

What happens to the treated wastewater?

The treated wastewater must be pumped to a designated land application area using one of the following methods:

- **irrigation system**
 - surface irrigation (spray above ground);
 - sub-surface irrigation (drippers in shallow trench);
 - covered surface irrigation (drippers on natural ground covered by mulch, woodchip, etc).
- **evapotranspiration-absorption trench/bed/mound**
 - trench or bed (embodies the principles of evaporation, transpiration and absorption);
 - elevated sand mound (specially constructed above natural ground level).

The type of land application area will depend on the level of treatment the wastewater has received prior to disposal.

Do I need to maintain the facility?

It is very important to understand that maintenance of a treatment plant or sand filter is mandatory under the *Plumbing and Drainage Act 2018* and is essential for the satisfactory performance of the facility.

The property owner is responsible to ensure the system is serviced at the required intervals by a licensed service agent in accordance with the manufacturer's requirements and Council's plumbing permit conditions. The type of maintenance varies depending on the type of system.

Maintenance for aerated wastewater treatment plants and sand filter systems

Servicing requirements will depend on the type of system installed but are generally:

- Aerated Wastewater Treatment Plant – every three (3) months; or
- Sand Filtration System – every twelve (12) months

Please contact the service agent for further information concerning the service history and requirements of the treatment plant.

Maintenance for septic systems

- Clean the outlet filter every three (3) months;
- desludging the septic tank unit every three to five (3-5) years by a licensed liquid waste contractor;
- the land application area must have the grass mowed and plants maintained;

Maintenance for composting dry vault systems

- to clean the pedestal use enzymes in place of disinfectant;
- daily operation of some composting systems requires adding a supplementary carbon source;
- inspect periodically, composted humus needs to be removed and buried.

Maintenance for greywater diversion facility

- clean filters every three (3) months;
- clean diverter tank every twelve (12) months;
- flush irrigation every twelve (12) months.

Maintenance for greywater treatment plant

- service as per manufacturers maintenance manuals.



Risks to public health and the environment

The inappropriate use or disposal of wastewater can have harmful impacts on public health and the environment. Untreated wastewater can:

- spread disease through bacteria, viruses, parasites, and other organisms;
- contaminate ground water and surface water;
- degrade soil and vegetation;
- cause loss of amenity due to odour or insects; and
- degrade waterways due to excessive levels of nutrients.

Council is responsible for ensuring on-site sewage facilities comply with performance standards and do not pose risks to public health and the environment.

Regulations

- The Plumbing and Drainage Act;
- Plumbing and Drainage Regulation;
- Australian/New Zealand Standard 1547: On-Site; Domestic Wastewater Management; and
- Queensland Plumbing and Wastewater Code.

Provide the regulatory framework for design, installation and management responsibilities for on-site sewage facilities within Queensland.

Where can I get more information?

For further information please contact Council's Customer Service Team on 1300 79 49 29.



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