

ON-SITE SEWAGE MANAGEMENT

Waterless composting toilets

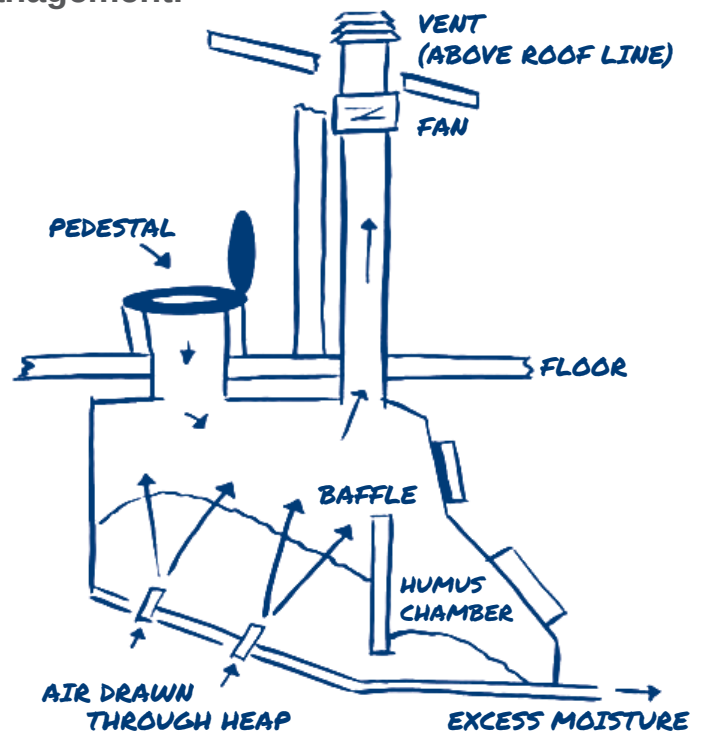
If you live in an unsewered area, you need to choose an appropriate method for the treatment and disposal of household wastewater to protect public health and preserve the environment. A waterless composting toilet is one alternative that can achieve sustainable on-site sewage management.

What are waterless composting toilets?

Waterless composting toilets (also known as humus closets) are systems that rely on the principles of composting by micro-organisms to decompose human waste, paper and other materials into humus (organic material that forms in soil when plant and animal matter decay).

Waterless composting toilets can be utilised on difficult sites as they do not require water. This can reduce household water usage by up to 35%. They also remove high levels of nutrients from wastewater, which decreases the land area required.

Waterless composting toilets do not treat greywater from other sources such as showers, sinks and washing machines, so an alternative split system will be required for this. It can incorporate a waterless composting toilet to deal with human excreta and collection and treatment of all other greywater using a reed bed or collection tank.



Approval to operate

All waterless composting toilets **MUST** have an approval to operate licence from Lismore City Council.

This approval is a means by which the Council can monitor and manage cumulative sewage pollution in local areas. It also ensures that property owners are aware of their responsibility to efficiently operate and maintain their system.

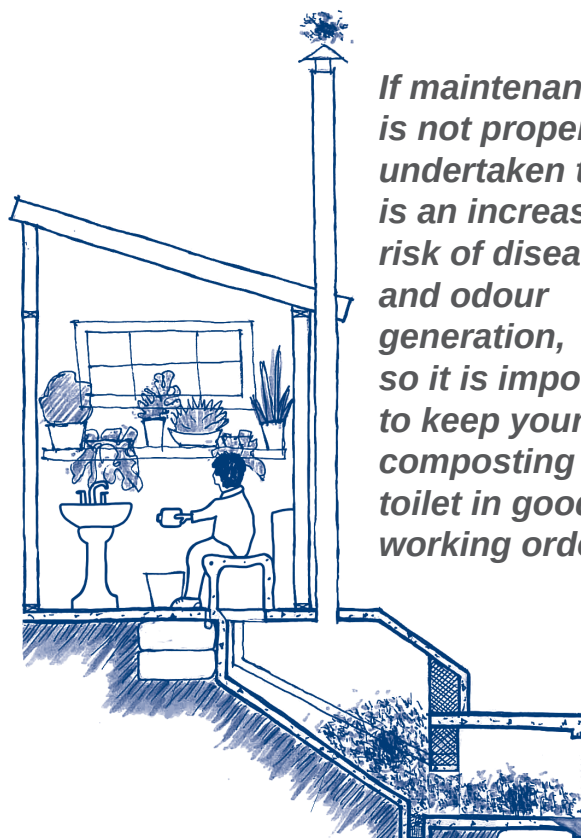
How do waterless composting toilets work?

- Waterless composting toilets may be installed inside or outside.
- Excreta (both faeces and urine) is collected in a sealed chamber beneath the toilet pedestal.
- Extra organic matter such as wood shavings, paper or vegetable scraps are added to create an ideal composting environment.
- Micro-organisms decompose the material, converting around three quarters of it to carbon dioxide and water vapour, which is removed by air drawn through the heap by an exhaust pipe.
- Any remaining solid material slowly falls down a sloping floor as more material is added to the pile.
- It then moves under a dividing baffle and into the humus chamber.
- The composting matter should remain in the chamber for at least 12 months and can then be used on your garden or buried. You must not remove it from your premises without written consent from Council.
- Excess liquids are drained, then treated with greywater.

How do I maintain waterless composting toilets?

- Maintenance of the toilet is the responsibility of the owner/occupier.
- It is recommended that systems be serviced annually by a suitably experienced contractor.
- Ensure material is spread evenly over the compost heap.

- Correct operation of the system requires the addition of carbon-rich materials such as vegetable scraps or lawn clippings into the composting system. This assists the decomposition process and reduces moisture content.
- Ensure the toilet seat/lid is kept shut when not in use to stop insects entering the composting chamber and to reduce odours.
- Only clean the pedestal by hand, using appropriate personal protective equipment, with minimal use of water and no disinfectants (vinegar is a good substitute).
- The minimum composting period should be no less than 12 months.
- Unless otherwise permitted by Council or NSW Department of Health, all compost from your system must be buried within the boundaries of your premises.



If maintenance is not properly undertaken there is an increased risk of disease and odour generation, so it is important to keep your composting toilet in good working order.

For more information contact Lismore City Council.
Phone **1300 87 83 87** or visit our website www.lismore.nsw.gov.au