

COMPOSTING TOILETS

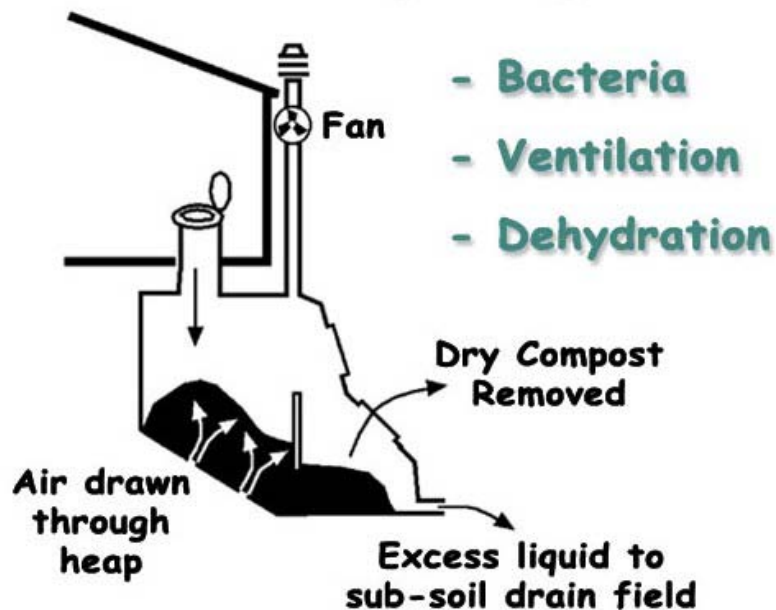
Composting toilets are a primary treatment system. There are two types of composting systems; wet and dry (waterless).

The advantage of a composting toilet is that it produces a by-product, which may be extracted and used in the garden as fertilizer, provided it complies with legislative requirements. Care must be taken when using the by-products as it is considered potentially infectious, and must be deposited at least 300mm below ground surface.

WATERLESS COMPOSTING SYSTEM

Only toilet waste is collected in the composting system. The solids are broken down by the combination of aerobic bacteria, dehydration fan induced circulation and temperature (ideally above 40C). Most liquid is retained and evaporates but excess effluent drains to a sub-surface land application system (e.g. absorption trench/beds or evapo-transpiration) unless further treatment processes are employed. A separate greywater septic tank is required to treat the household's wastewater, discharging to the land application system. A grease trap may be installed on the kitchen sink drain prior to connecting to the greywater septic tank. Composted material is required to be removed from the system and buried below ground according to legislative requirements.

**Cross-section
of a Waterless
Composting Toilet**



WET COMPOSTING SYSTEM

Wet composting systems usually incorporate worms into a chamber that receives all of the household waste. The waste is separated from the liquid by a filtration membrane.

Excess effluent drains to a sub-surface land application system, unless further treatment processes are employed. Composted material is required to be removed from the system and buried below ground according to legislative requirements.

To help with identifying the type of composting system, manufacturers are required to mark their system with their name or trademark, date of manufacture, design capacity, model identification, serial number and contact details for service.

NOTE:- All composting toilet systems are required to comply to the design rules under the Environmental Protection (waste management) Regulation 2000 and requirements of the Queensland Plumbing and wastewater code.

MAINTENANCE

Inspection and maintenance of composting toilet systems requires an understanding of the processes involved (composting, dehydration) and the optimum conditions for these processes. The manufacturer should provide manuals on safe handling of the compost material, operation and maintenance for the owner and routine service and maintenance by the manufacturer's service agent.

Inspection of the greywater system and land application system are the same as for septic systems.

It's recommended that you contact your Local Council and the Environmental Protection Agency for further information on regulations and owners responsibilities.