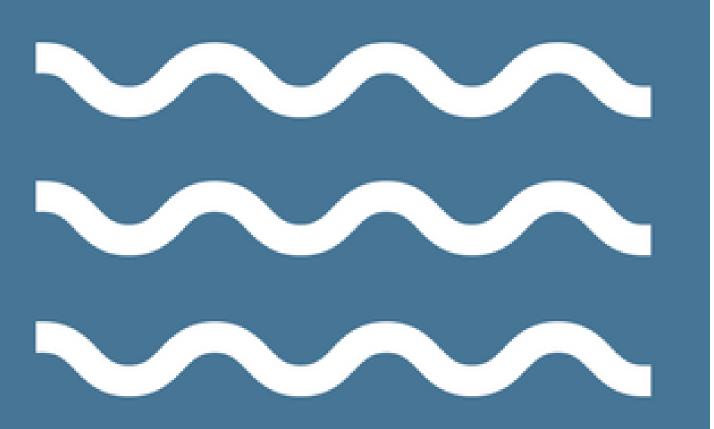


Treatment Systems Available Today.

EDWARDS & ASSOCIATES

WASTE WATER CONSULTANTS

> 2017 2017



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SEPTIC

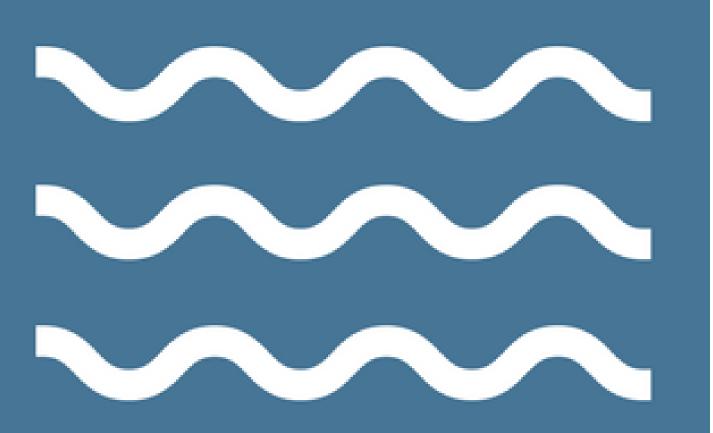
Untreated Systems

Appropriate where an Owner does not want regular servicing due to remote location with limited power and water supplies.

These black water (toilet effluent) and grey water (kitchen - from grease) traps, laundry and bathroom effluent systems are still able to be used today. However, both the black water and grey water have to be discharged underground by either absorption beds or evapotranspiration - absorption beds with turf or grass cover.

For these systems to be implemented, accurate on-site testing for soil permeability and soil dispersion characteristics is essential. The disposal areas have to be located a minimum of 50 metres from bores, dams or watercourse. The base of any beds shall be a minimum of 1.2m above a water table or bedrock.

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NORMAL

Home Sewerage Treatment Plants

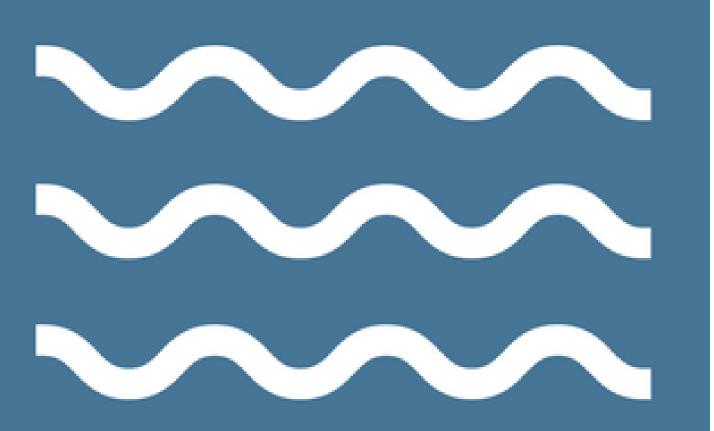
Require three monthly servicing with a qualified technician visiting the property and charging a service fee per year.

Effluent can be discharged on the surface except in some Queensland councils like Brisbane City.

Enables 100% recycling, watering lawns and gardens. Edge of surface irrigation shall be a minimum of 10m from residences and 30m from bores, dams and watercourses. 2m from boundaries and driveways, 6m from inground potable water tanks and a minimum of 0.6m above ground water or bedrock.

Some treatment plant manufacturers have an "advanced" model enabling effluent to be discharged 10m from edge of bores, dams and watercourses. However, not all councils allow this. Contact Edwards & Associates for clarification.

2017 2017



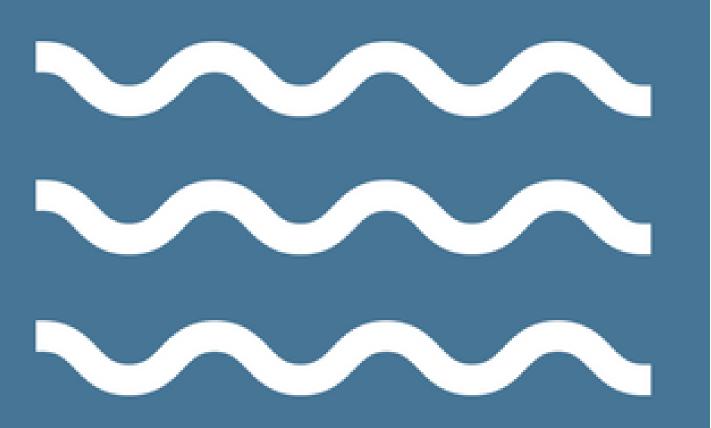
WASTE WATER CONSULTANTS removal

These systems are important in councils areas such as Scenic Rim Regional Council who do not allow effluent disposal within 30 metres of bores, dams and watercourses. Unless there is some sort of nutrient reduction in the effluent quality.

Contact Edwards & Associates for clarification.

2017 2017 I

A D V A N C E D **SECONDARY** quality with nutrient



COMPOSTING toilets

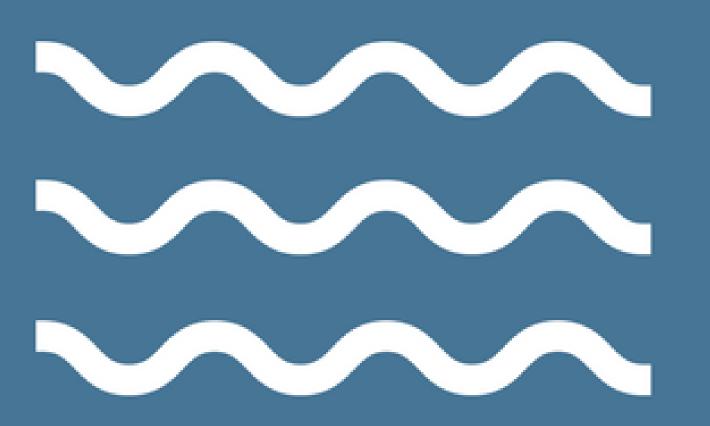
EDWARDS & ASSOCIATES

Appropriate where an Owner does not want regular servicing due to being a remote location with limited power and water supplies.

These systems all compost toilet waste with no water requirement. A small trench is required to absorb any excess liquids from the system.

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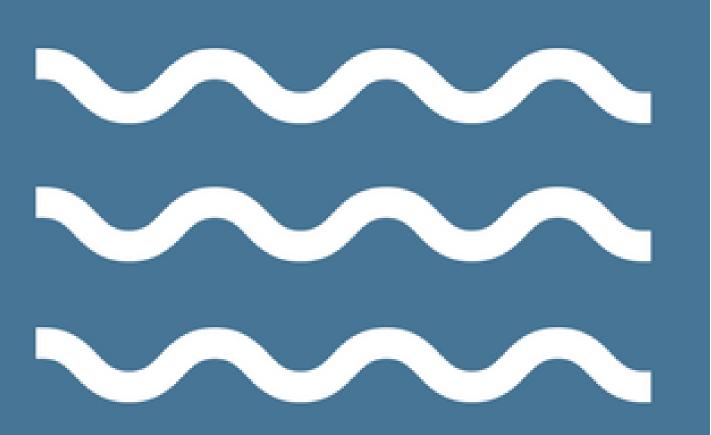
WORM TYPE composting toilets

Appropriate where an Owner does not want regular servicing due to being a remote location with limited power and water supplies.

This system must be underground and discharged into either absorption beds, evapotranspiration - absorption beds with turf or grass cover or mound systems.

Some manufacturers have produced organic systems that utilise worms, natural bugs and bacteria with ultra violet treatment as final disinfection and may be surface irrigated through gardens.

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PASSIVE SAND FILTER **SYSTEMS** and Filter Systems

Appropriate where an Owner does not want regular servicing due to being a remote location with limited power and water supplies.

These begin as a septic tank so no regular servicing required. The system discharges into a sealed sand filled bed approximately 1.8 m deep with an approximate surface area of 15 - 20m2.

Effluent may be utilised on the surface so 100% recycling is available to water lawns, gardens etc. Annual servicing at best.

These systems may cost more at the start, however earn their keep over a period of time. The sand beds have a guaranteed working life of 15 years. It is a popular choice throughout South East Queensland.

2017 I