

On-site Wastewater Disposal Systems

This fact sheet has been designed to provide you with information about on-site wastewater disposal systems. Many properties in the Cassowary Coast Regional Council area are not connected to Council's sewerage system. These properties must install an on-site sewerage facility to treat and dispose of all wastewater generated on the property. Development approval is required for the installation of a wastewater system, the relevant forms and applicable fees must be paid and lodged prior to any work commencing. This factsheet has been designed to help answer some of the most frequently asked questions we receive.

What is an on-site sewerage facility?

An on-site sewerage facility is any approved system that stores, treats, and disposes of household wastewater on a property. The landowner is responsible for ensuring the system is maintained and functioning properly. Some system types require regular servicing by licenced service agents. Systems that are poorly maintained can impact public health and the environment.

Septic systems and Aerated Wastewater Treatment Plants are the main types of treatment methods used to dispose of household wastewater within non-sewered areas. Septic systems and Aerated Wastewater Treatment Plants may be installed within properties subject to geotechnical soil test report results and local government approval. A list of approved wastewater facilities can be found on the [Department of Housing and Public Works website](#).

What is my responsibility as an owner?

Owners of a wastewater facility have legislative obligations under the Plumbing and Drainage Act 2018. Owners are required to ensure the on-site wastewater facility is maintained and serviced in accordance with the manufacturer's instructions and Local Government Plumbing Permit conditions.

Maintenance, servicing intervals and requirements depend upon the type of system installed but are generally serviced every 3 months. The service agent must be licenced with an additional on-site sewerage facility maintenance endorsement to carry out required scheduled maintenance.

A service report (Form 11) is prepared by the service agent after each service. A copy should be retained by the property owner and another copy must be forwarded to Council by the service agent.

Council is required to maintain a register of all treatment plants that require servicing and to monitor service dates to ensure required maintenance is carried out. Should Council become aware of an Aerated Wastewater Treatment Plant not being maintained as required, enforcement action may proceed.

What is a septic system?

A septic system uses biological methods to treat waste before discharging it through below ground trenches. Septic systems do not require regular service reports to be submitted to Council unless conditioned under the Local Government Plumbing Permit. It is important to be aware of the following basic maintenance requirements for septic systems:

- Septic tanks may need desludging approximately every five years by a professional pumping contractor.
- Trench areas must have the grass mowed, plants maintained and be protected from vehicle passage and livestock.
- Regularly clean out the grease trap if installed.

What is an Aerated Wastewater Treatment plant?

An Aerated Wastewater Treatment Plant is a type of plant that uses mechanical, biological and filtration methods to treat waste before discharging through either above or below ground irrigation systems (land application area).

Are there maintenance and service requirements for Aerated Wastewater Treatment Plants?

The maintenance of an Aerated Wastewater Treatment Plant is mandatory under the Plumbing and Drainage Act 2018 and is essential for the satisfactory performance of the facility. The property owner is responsible for ensuring the Aerated Wastewater Treatment Plant is serviced at the required intervals. Service requirements depend on the type of system installed but are generally serviced every three months.

The service agent must be licenced with an additional on-site sewerage facility endorsement to carry out required scheduled maintenance.

A service report is prepared by the service agent after each service. A copy should be retained by the property owner, and another must be forwarded to Council by the service agent.

Council is required to maintain a register of on-site sewerage facilities that require regular servicing in the area. Council is also required to monitor service dates and ensure required maintenance is being carried out. Should Council become aware of an Aerated Wastewater Treatment Plant not being maintained as required, enforcement action may proceed.

Maintenance tips to keep in mind

- ✓ Always keep your on-site sewerage facility accessible yet protected from unauthorised use.
- ✓ Conserve water and avoid overloading the system. Fix leaking taps and running toilets as soon as they are discovered.
- ✓ Use only recommended biodegradable products.
- ✓ Use washing and cleaning products that are recommended by the manufacturer and service agent.
- ✓ Ensure all treated wastewater is discharged to the designated area.
- ✓ Ensure tank lids are properly sealed to prevent entry of stormwater, mosquitoes, and other vermin.
- ✓ Become familiar with how your own system operates and the way it looks, sounds and smells when it is working correctly. This way you may be able to identify problems before they become serious and alert your service agent to anything unusual.
- ✓ Call your service agent when you encounter problems with your system, such as alarms or unusual odours.

Things to avoid

- ✓ Do not allow unauthorised alterations or repairs to be carried out on your on-site sewerage facility.
- ✓ Do not cover tanks with earth, concrete, pavers, mulch, or other material which could interfere with access or enter the tank when lids are opened.
- ✓ Do not park or drive over any part of the system.
- ✓ Do not allow children or animals to enter the land application/disposal area.
- ✓ Do not allow foreign objects such as plastic or rubber products, cloth, rags, sanitary products, bones, metal, glass, tea leaves or coffee grounds to enter the system as they will cause blockages.
- ✓ Do not use products that contain bleach, ammonia, antiseptic or antibacterial elements.
- ✓ Do not discharge chemicals such as paint, varnish, thinners, pesticides as products like these will kill the bacteria which assist with the successful operation of the system.
- ✓ Do not switch off the system.
- ✓ Do not irrigate fruit and vegetable crops with treated effluent.
- ✓ Do not allow surface sprayed effluent to pond or run off the property or use mist sprays on surface irrigation lines.

What is a Land Application / Disposal Area?

Treated wastewater must be discharged to a designed land application/disposal area. The most common methods are:

Irrigation System

- Surface irrigation (spray above ground)
- Sub-surface irrigation (drippers in a shallow trench)
- Covered surface irrigation (drippers on natural ground covered by mulch, woodchip etc)

Evapotranspiration-Absorption Trench/Bed

This method embodies the principles of evaporation, transpiration, and absorption.

Conventional Absorption Trench/Bed

This method embodies the principle of absorption only. The type of land application area will depend on the type of soil that will receive the treated effluent and other site constraints. The land application area must be kept in its approved form. A well-maintained area is critical to ensure adverse health and/or environmental effects are minimised. For advice regarding suitable plants for land application areas, please contact the manufacturer or your service agent.

I need to install an on-site wastewater disposal system. Where do I begin? What things should I consider?

The first thing you should do is contact an appropriately qualified site assessor or designer in wastewater management to carry out an on-site assessment of your property. A geotechnical soil test will be undertaken to determine the type and category of soil that is on your property as this will help to determine the type of system that is suited to your property.

Where possible, provide all the information that the assessor needs in relation to what you intend to do on the site. Try to be present at the site assessment, as the more input you have at the time of assessment, the better the final design will be to suit your needs. Let the assessor know of your future intentions and plans (e.g., where you are thinking of putting a future shed, swimming pool, landscaping, house extensions etc.) as these will have an impact on the location and size of

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available land for the installation of the disposal system.

Also advise the assessor of the number of people residing on site. The system should be designed to cater for the worst-case scenario (holidays, family visiting, future extensions, additional bedrooms etc.). Keep in mind that each individual block of land may require a different type of disposal system and just because a neighbour has a certain type of system, doesn't mean it will be suitable for you. When the geotechnical report has been prepared by your assessor you can move onto lodging your application.

I want to replace an on-site wastewater disposal system. Where do I begin? What things should I consider?

The need to replace on-site wastewater disposal system can happen for a variety of reasons. Often, it's due to failure, but sometimes it's due to financial reasons (e.g., an owner wishes to change from a system that requires regular servicing to one that doesn't).

As above, the first thing you should do is contact an appropriately qualified site assessor or designer in wastewater management to carry out an on-site assessment of your property. If applicable, advise the assessor of your desire to change from a system type that requires regular servicing to one that doesn't. The assessor may carry out another geotechnical soil test to determine the type and category of soil that is on your property.

Try to be present at the site assessment, as the more input you have at the time of assessment, the better the final design will be to suit your needs. Let the assessor know of previous system failures and of your future intentions and plans (e.g., where you are thinking of putting a future shed, swimming pool, landscaping, house extensions etc.). These things have an impact on system type and the location and size of available land for the installation of the disposal system.

Still keep in mind that each individual block of land may require a different type of disposal system and just because a neighbour has a certain type of system, doesn't mean it will be suitable for you. When the geotechnical report has been prepared by your assessor you can move onto lodging your application.

Lodging an application with Council

Please see the Building and Plumbing applications guidelines and Applications Checklist for more information.

Further Information

For further information contact Council at 1300 763 903 or email enquiries@cassowarycoast.qld.gov.au.