

FACTSHEET 5: OWNER ACTIONS TO IMPROVE SEPTIC TANK FUNCTION

Septic tank systems that are failing can release sewerage pollution into your backyard and can contaminate waterways and spread disease.

The costs of a failing septic tank system

In Australia 18-20% of homes use onsite treatment, up to 25% in the US, and 33% in countries like Ireland and is increasing.

Audits across Australia indicate 15-40% of systems periodically perform poorly or fail.

If a large number of septic systems are not functioning properly parts of the Moyne Shire could face major pollution problems.

Poorly managed septic tank systems pose a potential risk, particularly to children and pets that use the backyard where untreated wastewater is discharged, or may swim or play in creeks and drains where polluted run-off is present.

Septic run-off can promote algal growth, pollute waterways, dams, and wetlands, and result in water-logged landscapes, impacts to aquatic life, amenity, and farm animals.



The totality of inputs to the septic system

Poor management of your septic tank system can cost you and the community money as well as wasted time and inconvenience.

-Septic tank not desludged every 3-5 years (depending on wastewater load) otherwise:

- Pay \$3000 for a new trench.

-The toilet blocks and then overflows:

- Pay at least \$500 for carpet cleaning.

-Your pet becomes ill from drinking effluent:

- Pay \$400 in vet fees.

-Your pump fails due to lack of maintenance:

- Pay at least \$300 for repairs.

-You reverse your car over the system:

- Pay \$12000 for a new system.

-Neighbours complain of odour to Moyne Shire Council because your system is not working:

- Pay \$1200 in fines.

Indications of failing septic tanks and soil absorption trenches

- Seepage along effluent absorption trench lines in the soil.
- Lush green growth down-slope of the soil absorption trench lines.
- Lush green growth down-slope of the septic tank
- Inspection pits and/or the soil absorption trenches consistently exhibiting high water levels.
- Soil absorption trench lines become waterlogged after storms.
- General waterlogging around the effluent disposal area.
- Presence of dead and dying vegetation (often native vegetation) around and down-slope of the effluent disposal areas.

MOYNE SHIRE COUNCIL

- A noxious odour near the tank and the effluent disposal area.
- Blocked water fixtures inside the house, with sewage overflowing from the relief point.
- High sludge levels within the septic (primary) tank (within about 150 mm of inlet pipe).
- Flow obstructed and not able to pass the baffle in the tank.
- The scum layer blocking the effluent outflow.

Common causes of septic system problems

• Tank too full

If you have a septic tank and absorption trench system, the level in the tank should not be higher than the outlet.

Solution: Have your septic tank pumped out.

• Too much sludge and scum in the tank

Septic tanks work by retaining solid scum and sludge and just letting liquid effluent flow out to the trenches.

The solids don't move out of the tank. They just stay behind and build up. If you don't have the tank pumped out (de-sludged) regularly, it will eventually fail and untreated wastewater with heavy solids contamination will flow out of the tank, clogging pipes and the absorption trenches. You should have your tank pumped every 3 to 5 years.

Solution: De-sludge (pump-out) the tank.

• Too much water going into the system

This causes the effluent to flow too quickly through the tank before the bacteria have a chance to work.

As a result, solids can be pushed through the system, polluting the holding tank or clogging the absorption trenches.

Solution: Use less water. Homes on tank water are already used to conserving water, but in homes connected to reticulated water, there is much more temptation to overuse water.

• Toxic chemicals going into the system

Chemicals like solvents, oils, paints, disinfectants, pesticides, household cleaning products and bleaches can kill the helpful bacteria in your septic system. This may 'kill' the system and stop it digesting effluent.

Solution: Switch to natural cleaners if possible, and use smaller amounts. You can protect your septic system by using traditional non-toxic cleaners, like vinegar and bicarbonate of soda in the kitchen and bathroom.

How to best manage your septic tank system

- Don't dispose of oils, grease, food scraps, paints, medicines, tampons or condoms in your system. Personal care and hygiene products flushed down the toilet can take a long time to break down and can clog components of the system.
- Use biodegradable and low phosphorous kitchen and laundry cleaning products. Phosphorous is a major pollutant of waterways and contributes to algal blooms and environmental degradation. Disinfectants and bleach-based cleaning products kill off beneficial bacteria in your system that breaks down the waste.
- Ensure your laundry detergents are low in Sodium. Sodium can have negative impacts on the soil and vegetation in your wastewater disposal area which are vital to the wastewater system.
- Use liquid detergents and highly biodegradable powder detergents to reduce impact to your wastewater system and surrounding environment. Use soapy water (made from natural unscented soap), vinegar and water or bi-carbonate of soda and water to clean toilets and other water fixtures and fittings.

MOYNE SHIRE COUNCIL

- Read labels to learn which bathroom and laundry products are suitable for septic tanks. Generally plain, non-coloured, unscented and unbleached products will contribute to a well-functioning septic tank.
- Wipe oils and fats off plates and saucepans with a paper towel and dispose of in the kitchen compost bin. Use a sink strainer to restrict food scraps entering the septic system.
- Select a front-loading washing machine where possible as they use less water. Wash only full loads. Hand-washing of small items saves water.
- Avoid blockages in the system by installing a lint filter on the washing machine and keeping it clean.
- If you have a blocked drain, use boiling water or an electric eel to clear the line rather than using caustic soda or other chemicals that will affect the functioning of the system.



- Try to minimise your water usage and attempt to spread water use over the day. Do your washing for only short periods to avoid flooding the system with large amounts of water.
- Repair leaking taps and toilets as soon as possible. Remember that all water produced has to go somewhere on your property.
- Keep a record of the location of the tank and the trenches and all maintenance reports and ensure the service technician sends a copy of the maintenance report to the local Council.

- Plant suitable plants around your effluent disposal areas which take up wastewater. A list of these plants can be obtained from Council.
- Ensure that only registered plumbers undertake alterations or repairs to your system in accordance with Council's *Permit to Use* conditions.
- Get to know your system. Refer to the owner's manual, talk to your plumber, or contact the Environmental Health unit at Moyne Shire Council to obtain information.
- Ensure no structures such as pavements, driveways, patios, sheds or playgrounds are constructed over the tank or absorption trench area. Ensure the absorption trench area is not disturbed by vehicles or machinery. Do not drive a vehicle over any part of the septic tank system, especially the trenches.
- Get your system desludged every 3 years as per Council's environmental health requirements. Have the tank desludged when the combined depth of the scum and sludge is equal to the depth of the middle clarified layer.
- Plant suitable plants around your effluent disposal areas which take up wastewater. A list of these plants can be obtained from the Council.
- Ensure that only registered plumbers undertake alterations or repairs to your system in accordance with Council's permit to use conditions.
- Get to know your system. Refer to the owner's manual, talk to your plumber, or contact the Environmental Health Unit at Moyne Shire Council to obtain information.

Information Guide adapted from existing Dept. of Local Government NSW resources. Moyne Shire Council acknowledges these sources.