

# Flooding and on-site wastewater systems

On-site wastewater systems, such as septic tanks and aerated wastewater treatment systems (AWTS), and their land application systems, for example sprinklers and below ground drippers, can be affected by flood waters.

Avoid using flood-affected wastewater systems until assessed by a licensed plumber or service technician familiar with on-site wastewater systems.

Contact with effluent or untreated wastewater from damaged on-site wastewater systems can cause illness and should be avoided at all times.

## Flood water damage

Most on-site wastewater systems should not be structurally damaged by flooding, because they are below ground. If a wastewater system has been under flood water the tank and land application field can fill with silt and debris. If you suspect the wastewater system is damaged, do not use any toilets, laundry, kitchen, bathroom or clean-up equipment connected to the onsite wastewater disposal system until:

- All parts of the wastewater treatment and disposal system have been inspected and repaired by a licenced plumber or authorised service technician familiar with on-site systems.
- Your onsite wastewater treatment and disposal system has been inspected and approved for use by the local council.

## Indicators of damage

Flooding of wastewater systems may wash out solids from the tank causing blockages or system damage. Safety issues that need checking include open covers or pits, ruptured and leaking tanks and pipes, and damaged or exposed pipes. Failed systems are not easy to identify, but some indicators of damage include a pungent odour around the tank and land application area, sewage overflowing from toilets and sinks, and high sludge levels within the primary tank. If your system is damaged and presents an immediate safety risk, action should be taken as soon as practicable to make it safe. For example, if the lid is missing, place a temporary cover or fencing around the system to prevent access to the area.

The system may need to be pumped out after a flood to remove silt and debris; however, it is advisable to only leave the tank empty for a short time to avoid the tank floating out of the ground and damaging inlet and outlet pipes.

## Wastewater systems

Plastic and fibreglass on-site wastewater systems, or systems made with plastic components, are more susceptible to damage than concrete tanks particularly if installed above ground. This includes shallow PVC pipes, plastic tanks and sumps, and plastic irrigation pipework which may be installed above or below ground. Pumps and other equipment with electrical components may also be damaged.

It is recommended that damaged on-site wastewater systems are not used until repaired or replaced.

## Actions

Due to the risks associated with using systems after a flood, the following actions are recommended:

- Avoid using the wastewater system until flood water has subsided to at least the level of the land application field.
- If the on-site wastewater system is damaged, arrange repair of the system as soon as possible.
- Repair or replace damaged electrical components and pumps as soon as possible.
- Reduce water use as much as possible until the system is inspected and repaired by:
  - Reducing the frequency of toilet flushing for liquid waste
  - Taking shorter showers or shower elsewhere
  - Limiting laundry and dishwashing as much as possible. If possible avoid using automatic clothes washers and dishwashers.
- If the power has not been restored, the septic tank can be used as a temporary holding tank and pumped out periodically, provided the tank is not damaged.
- You may need to disconnect the pump (if present) and block the outlet to the land application area. If the tank is significantly damaged and can't be used as a temporary holding tank, do not use the system until it is repaired or replaced.
- Once power is restored, ponding may occur near the wastewater system and these areas should be avoided. Contact a licenced plumber or authorised service technician to reassess the system.

## Further Advice

The manufacturers of on-site wastewater systems should have information and user manuals about their systems on their web sites.

Sanitation is very important for the whole community. Your local Council is able to provide further advice about measures that can be taken while on-site wastewater systems are repaired or replaced.

## For further information

1. Contact your local council: <https://www.olg.nsw.gov.au/public/find-my-council/>
2. Contact your local Public Health Unit by calling 1300 066 055: <https://www.health.nsw.gov.au/Infectious/Pages/phus.aspx>
3. Refer to the NSW Health guidelines: <https://www.health.nsw.gov.au/environment/domesticwastewater/Pages/default.aspx>