



AWTS Guide

Management of 'Aerated Wastewater Treatment Systems' in Wollondilly Shire



Prepared 2024

CONTENTS

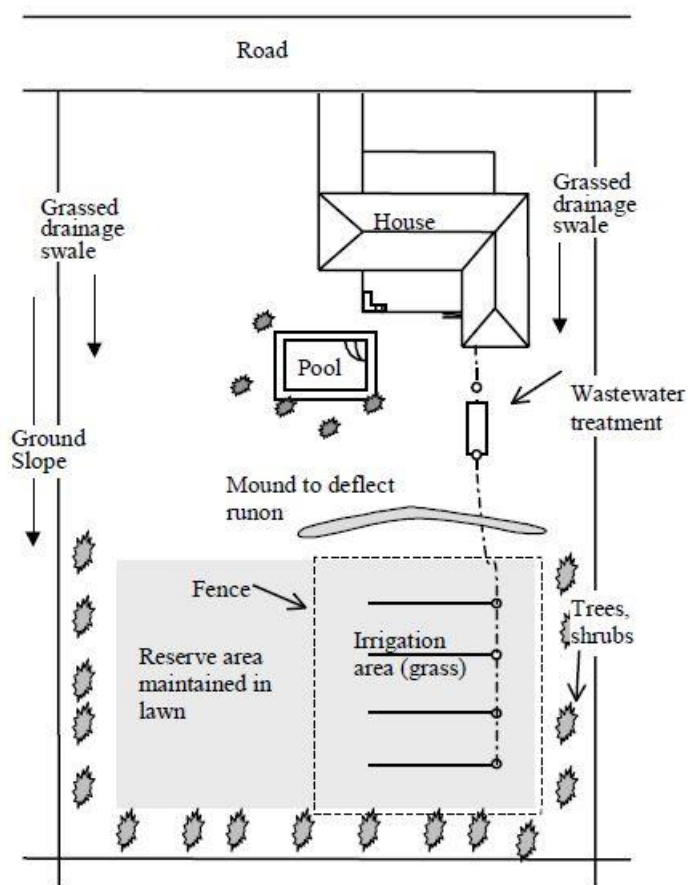
1	INTRODUCTION	3
2	HOMEOWNERS AND SERVICE AGENTS RIGHTS & RESPONSIBILITIES	4
3	CHECKLIST FOR HOMEOWNERS	6
4	AWTS SERVICE AGENTS CRITERIA	9
5	SERVICE AGENTS REPORTING REQUIREMENTS	10

1 INTRODUCTION

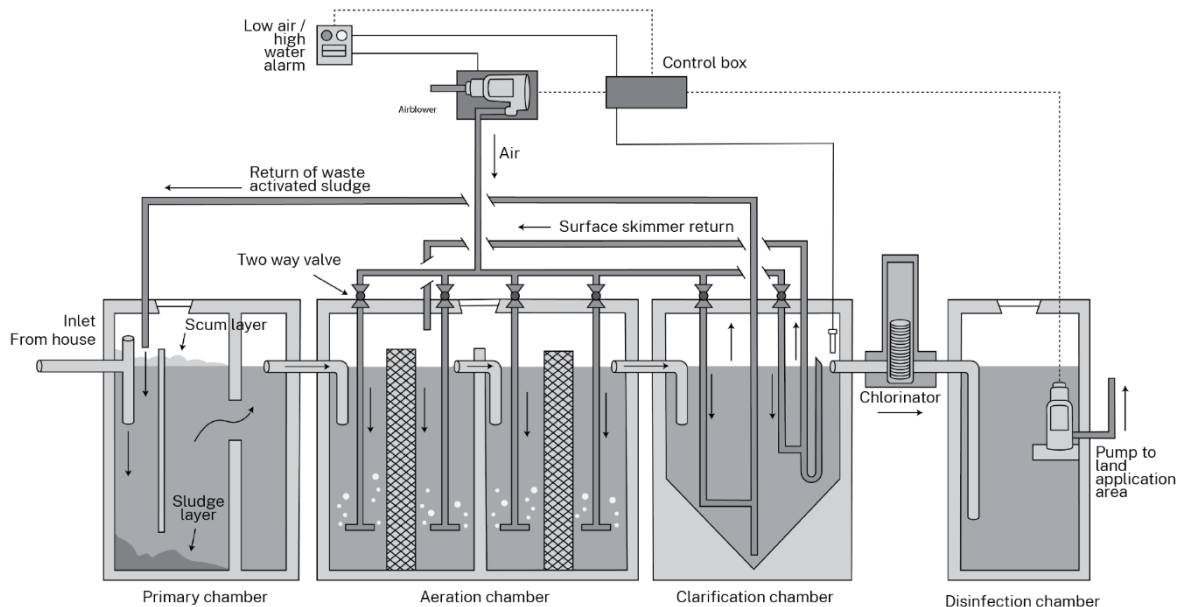
The careful management of existing Aerated Wastewater Treatment Systems across Wollondilly Shire is required to minimise impacts to the environment and public health. This document aims to help guide the operation of **existing** on-site Aerated Wastewater Treatment Systems in the Shire. Many households in the Shire have on-site management of domestic sewage by an Aerated Wastewater Treatment System 'AWTS'.

AWTS generally include a wastewater treatment tank and some form of land disposal system (e.g. sprinkler irrigation area or subsurface drip irrigation). An AWTS provides a higher quality of effluent treatment, as compared to a standard septic tank, they include aeration (aerobic treatment) and disinfection. An AWTS tank typically has multiple chambers with pumps and chlorine disinfection. The components of the tank require on-going monitoring and maintenance to operate at the level to which they were designed. AWTS units must be serviced by a private contractor at least once every 3 months. Regular quarterly servicing is a mandatory requirement as per Council and NSW Health department approval conditions.

The servicing of each AWTS unit is necessary to ensure that the system is operating at a level, whereby the quality of treated effluent is to an acceptable standard. Effluent treated to a satisfactory level helps to minimise risk to public health (including household occupants) and risk to the environment (including drinking water supply catchments). Note that diseases and viruses (e.g. stomach bugs, hepatitis) can be transferred by effluent if it is not appropriately treated.



Typical layout of an AWTS treatment tank & effluent disposal Irrigation Area
(Source: NSW Department of Local Government [1998] Environment and Health Protection Guidelines: On-site sewage management for single households)



Cross-section of an AWTS tank system

(Source: Dept of Local Government [2024] Draft Environment & Health Protection Guidelines : Onsite Wastewater Management [adapted from Designing and Installing On-site Wastewater Management Systems - WaterNSW 2023])

2 HOMEOWNERS AND SERVICE AGENTS RIGHTS & RESPONSIBILITIES

All AWTS units must be serviced regularly by a private contractor, the homeowner is responsible for organising a suitable contractor to undertake servicing. The owner of an AWTS should expect a high quality of servicing, which should be provided in a timely manner by the service agent.

2.1 Homeowners Rights & Responsibilities

- Each homeowner has a legal responsibility to ensure the correct operation of their AWTS in accordance with the requirements of their Council approval.
- The owner must engage a suitably experienced and qualified Service Agent (that is acceptable to Council) to undertake quarterly (3-monthly) servicing of their AWTS. An annual service contract/agreement shall be entered into with the service agent.
- The owner has the right to receive a standard of servicing from the service agent that maintains the AWTS in a healthy condition and complies with Council approval.
- The owner has the right to receive a copy of the service report from the service agent after each quarterly service has been completed.
- Owners have the right to change their service agent if they are dissatisfied with the level of service being provided.
- An owner should not expect to experience long delays in having their AWTS repaired, particularly in emergency breakdown situations.

- The owner must not modify the AWTS unit including the irrigation/disposal system, without obtaining prior consent from Council.
- An owner should keep a record of servicing and repairs.
- An owner must notify Council in writing if they change from their current service agent to another service agent.
- The owner needs to provide easy access to the AWTS to enable ready servicing.
- When repairs are needed that are beyond the standard routine service, then the owner needs to co-operate with the service agent in getting the repairs undertaken.
- Please note that Council has the power to issue penalties should an AWTS not be maintained in accordance with its approval conditions.
- The owner shall have a current 'Approval to Operate' sewage management licence to operate their system. These licences are obtained from Council and are valid for a period of 1, 3 or 5 years depending on the level of risk associated with the particular system.

2.2 Service Agents Rights & Responsibilities

- Each Service Agent shall provide timely quarterly servicing of the owners AWTS tank and disposal system.
- The AWTS must be maintained by the service agent in accordance with the manufacturers requirements.
- The service agent will notify the owner, in writing, if the AWTS requires repairs that are not able to be completed as part of a routine service in accordance with the service agreement.
- Service agents need to have ready access to spare parts and service manuals (if available) for the AWTS that they are maintaining.
- Provide a 24/7 servicing availability in case of emergency.
- The service agent will provide the owner with a copy of each service report in a timely manner, and also forward-on all service reports to Council, within seven (7) days through the on-trac electronic reporting process.
- Give the owner notice if the service agent is to discontinue servicing at a particular property.
- Notify Council should the service agent cease to service a particular property.
- Inform Council if an owner is unwilling to have deemed necessary repairs undertaken.

3 CHECKLIST FOR HOMEOWNERS

To assist in the operation of your AWTS, you should apply the following recommendations:

- ◇ Regular servicing every 3 months by an appropriately qualified service contractor that includes monitoring and maintenance of the treated effluent sprinkler irrigation area.
- ◇ Do not locate sprinklers in close proximity to property boundaries, and avoid any potential spray or spray-drift from leaving your property. Buffer setbacks need to be complied with.
- ◇ The irrigation area needs to be adequately landscaped and not used for recreation.
- ◇ The power supply and irrigation pipe-line need to remain connected to the AWTS tank at all times.
- ◇ Be careful not to damage your irrigation pipe-line while lawn-mowing.
- ◇ Only use approved AWTS hoses and fittings for the irrigation pipe-line.
- ◇ Signs should be installed on the edge of the irrigation area (e.g. 'Reclaimed effluent, Do not drink, Avoid contact').
- ◇ Check if there is a triggered alarm or warning light associated with the AWTS (contact your service agent if an alarm is activated).
- ◇ Check for offensive smelly and/or over-saturated areas.
- ◇ Ensure there are no leaking or broken irrigation pipes, or blocked sprinklers.
- ◇ *Avoid* putting fats and oils down the drain to prevent your system from clogging-up.
- ◇ *Avoid* putting bleach and large amounts of disinfectants and cleaning products down the drain to maintain the systems bacteria health.
- ◇ *Avoid* compacting the soil with heavy equipment to maintain good system flow.
- ◇ *Install* water-saving devices to reduce the pressure on your aerated septic system.
- ◇ *Minimise* wastewater surges going to your aerated septic system by spreading-out laundry washing during the week, rather than all on one day.
- ◇ *Do not* grow edible food crops on your treated effluent disposal irrigation area.

WARNING
RECLAIMED
EFFLUENT
DO NOT DRINK
AVOID CONTACT

Signs of Failure

- ◇ A triggered alarm or warning light associated with the AWTS.
- ◇ Smelly or over-saturated irrigation areas.
- ◇ Leaking or broken irrigation pipes, or blocked sprinklers.

Your service agent or licensed plumber should be contacted as soon as you notice a problem.



Example of a poorly maintained and overgrown AWTS tank



Example of a failed AWTS irrigation sprinkler system (ponding of effluent)

4 AWTS SERVICE AGENTS CRITERIA

Each service agent needs to meet the following criteria to undertake servicing of AWTS within Wollondilly Shire. Owners should check that the service agent is appropriately qualified and experienced before engaging them.

- Service agents must have previous experience in servicing AWTS units. Provide evidence of service history.
- The service agent shall have attended an appropriate AWTS servicing Training Course OR have been trained by an AWTS manufacturer. Provide a copy of the training certificate or letter from AWTS manufacturer.
- The service agent shall have ready access to spare parts for AWTS units.
- Have access to Service Manuals (if available) for the AWTS units to be serviced.
- Able to provide a 24 hour, 7 days a week emergency service. Written confirmation of this commitment to be provided.
- Servicing must include monitoring and maintenance of the AWTS disposal area.
- The service agent shall hold the appropriate insurance policy/s.
- Service agents must forward-on all service reports to Council, within seven (7) days through the on-trac electronic reporting process.
- The service agent will notify Council in writing if they cease servicing an AWTS at a particular property.



5 SERVICE AGENTS REPORTING REQUIREMENTS

Every service agent is to monitor and undertake servicing of the AWTS treatment tank/s and the treated effluent disposal system, at each service. Quarterly servicing is required, with service agents forwarding on all service reports to Council, within seven (7) days through the on-trac electronic reporting process.

The following is an example (informative only) of the items to be checked when undertaking an AWTS service:

Sludge levels	Aeration working
Scum levels	Air blower pump operating
Pump-out required?	Alarms working
T-piece/square junction pipes clear	Filters clean
Sludge return working	Bio-film growth adequate
Skimmer working	Removed any plant roots in tank
Disinfection (e.g. chlorine replenished; UV)	Irrigation pump operating
Free residual chlorine mg/L (0.2 to <2mg/L)	Disposal area free of ponding
Odour	Sprinklers working
Clarity	Condition of irrigation pipe
pH reading	Warning Signs installed
Lid/s secured	Control box general condition
Any repairs required	



For additional information, please contact Council:

- Email council@wollondilly.nsw.gov.au
- Telephone (02) 4677 1100
- In person 62-64 Menangle Street Picton
- Mail P.O. Box 21, Picton, NSW, 2571.