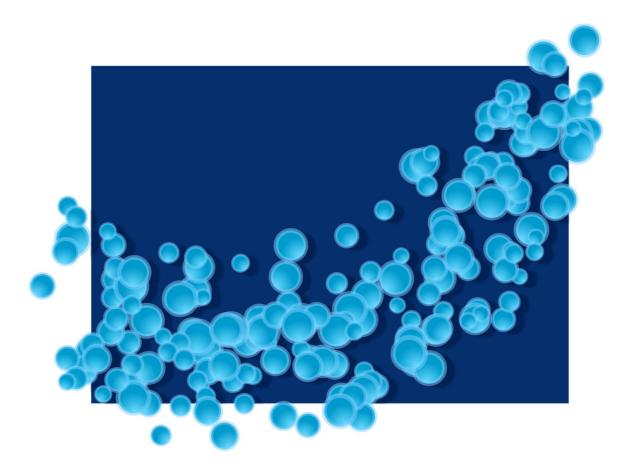


Managing Aerated Wastewater Treatment Systems



On-Site Sewage Management in Wingecarribee Shire

Prepared July 2017

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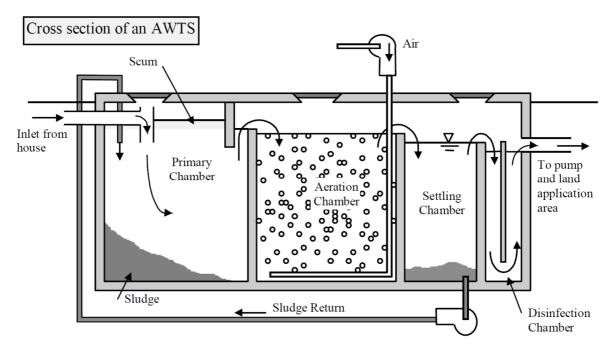
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1. INTRODUCTION

This document has been developed to help guide the operation of existing on-site Aerated Wastewater Treatment Systems across the Wingecarribee Shire. Many households in the Shire (approximately 1/3 of non-sewered households) have on-site management of domestic sewage by an Aerated Wastewater Treatment System 'AWTS'.

An AWTS typically includes a treatment tank and some form of land disposal system (e.g. sprinklers or subsurface irrigation). An AWTS provides a higher quality of effluent treatment, as compared to a standard septic tank, including 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.

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.



(Source: Dept of Local Government [1998] Environment & Health Protection Guidelines)

2. OWNERS AND SERVICE AGENTS RESPONSIBILITIES & RIGHTS

Home-owners must have their AWTS unit serviced regularly by a private contractor. 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 Owners Responsibilities & Rights

- The owner 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 2, 3 or 5 years depending on the level of risk associated with the particular system.

2.2 Service Agents Responsibilities & Rights

- A 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's 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 provide Council with a copy of the report (within 30 days after the service).
- 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, in writing, if an owner is unwilling to have deemed necessary repairs undertaken.

3. HOME-OWNERS CHECKLIST

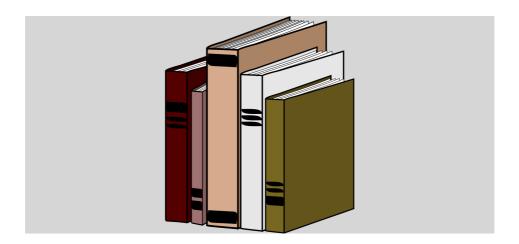
To aid the operation of your AWTS, you should adopt the following recommendations:

□ Routine service every 3 months by an appropriately qualified service agent that
includes monitoring and maintenance of the tank/s and treated effluent disposal
area.
☐ The treated effluent disposal area needs to be adequately landscaped and not
used for recreation.
☐ The power supply and irrigation pipeline need to remain connected to the AWTS
tank at all times.
□ Be careful not to damage your irrigation pipeline while lawn-mowing.
□ Only use AWTS hoses and fittings for the irrigation pipeline.
$\hfill \square$ If your AWTS has sprinklers attached to it, then ensure that there are an adequate
number of sprinklers, to enable sufficient distribution and avoid ponding of treated
effluent.
□ Do not locate sprinklers in close proximity to property boundaries, avoid any
potential spray or spray-drift from leaving your property. Buffer setbacks need to be
complied with.
□ Signs should be installed on the edge of the irrigation area (e.g.
'Reclaimed/Recycled effluent in this area, 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 (if
present).
□ Do not put bleach and large amounts of disinfectants and cleaning products down
the drain to maintain the systems bacteria health.
□ Do not put fats and oils down the drain to prevent your system from clogging-up.
□ Do not compact the soil with heavy equipment to maintain good system flow.
□ Do install water-saving devices to reduce the pressure on your AWTS.
□ Do minimise waste-water surges going to your AWTS by trying to spread-out
laundry clothes-washing throughout the week, rather than all on one day.
Do not grow edible food crops on your treated effluent disposal area.

4. CRITERIA FOR AWTS SERVICE AGENTS

Service agents need to meet the following criteria. Owners should check that the service agent is appropriately qualified and experienced before engaging them.

- The Service agent must have previous experience in servicing AWTS units. Provide evidence of service history.
- Service agents 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 employer.
- 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.
 Provide a copy of your standard Service Report sheet.
- The service agent shall hold the appropriate insurance policy/s.
- A copy of each service report shall be sent to Council within 30 days after a service is completed.
- The service agent will notify Council in writing if they cease servicing an AWTS at a particular property.



5. REPORTING REQUIRMENTS FOR SERVICE AGENTS

All service agents are to monitor and undertake servicing of the AWTS treatment tank/s <u>and</u> the treated effluent disposal system, at each service. A copy of each quarterly service report shall be provided to the owner and to Council.

An example (informative only) of the items that an AWTS service report should address is provided below:

Service company details	Address of system location
Name of service personnel	Owners details
Date of service	System type/brand
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
Repairs required	Comments

For further information, please contact Council's Environmental Protection Officer by:

- Email <u>mail@wsc.nsw.gov.au</u>

- Telephone (02) 4868 0888

- In person 68 Elizabeth Street Moss Vale

- Mail P.O. Box 141, Moss Vale, NSW, 2577.