



On-site Sewerage Management Policy



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Document Control

Policy	On-Site Sewerage Management Policy	Policy Number	TBA
Author/Reviewer	Director Sustainable Growth	Review Period and Date	Reviewed within 12 months of election/4 yearly - September

This policy shall be reviewed: -

- This policy shall be reviewed within 12 months of an election, and thereafter at four yearly intervals at least, to ensure it meets all statutory requirements and the needs of council. It may also be reviewed at other times as determined by council.

Document History

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1. INTRODUCTION

Effective management of domestic sewage and wastewater is an important consideration for the public health of Hilltops residents and the environment in which they reside. It requires the active involvement of both the Council and landholders.

This Policy has been developed to guide Hilltops Council to assess, regulate and manage the selection, design, installation, operation and maintenance of new and existing on-site sewage management systems.

2. PURPOSE

The purpose of the On-site Sewage Management Policy is to:

- Guide landholders towards sustainable on-site management of domestic sewage and waste water;
- Protect and enhance public health and the environment within the Hilltops Council area;
- To enable efficient regulation and monitoring of on-site sewage management systems.
- To maintain compliance to Legislation and Regulation in NSW.

3. OBJECTIVES/GOALS

The objectives and goals of this On-Site Sewage Management Policy are -

- **Prevention of public health risk** - sewage contains bacteria, viruses, parasites and other disease-causing organisms. Contact with effluent increases the risk to public health.
- **Protection of the environment** - on-site sewage management systems should be selected, situated, designed, constructed, operated and maintained to ensure land, groundwater or surface water is not contaminated by any on-site sewage management systems.
- **Ecologically sustainable development** - on-site sewage management systems must be installed and operated in such a manner that will allow the system to operate satisfactorily on a long term basis, whilst maintaining acceptable environmental and public health standards.

4. DEFINITIONS

- **Community Facility** refers to a facility used for community events, sporting events and gatherings.
- **Environmentally Sensitive Area** land identified in an environmental planning instrument or mapping as being in an area identified as ground water vulnerable or high biodiversity significance.
- **Floodzone** land identified as flood prone in the 'Flood Plain Risk Management Study and Plan – The Town of Young (2015), Draft Boorowa Flood Study 2016 and Jugiong Flood Study.
- **Intermittent Watercourse** means any creek, gully, stream or chain of ponds, whether artificially modified or not, in which water flows periodically and sporadically.
- **Permanent Watercourse** means any river, creek, stream or chain of ponds, whether artificially modified or not, in which water flows continuously.



5. IMPLEMENTATION PROGRAM

Council's regulatory program to meet the stated objectives/goals will include the following:

- Applications will be required for all new On-site Sewage Management Systems under Section 68 of the Local Government Act, 1993.
- All existing and proposed On-site Sewage Management Systems are to be registered with council.
- New and existing On-site Sewage Management Systems will be inspected as per the assessed level of risk, as prescribed within this Policy.
- All existing On-site Sewage Management Systems are to be licenced to the property owner.
- Community education initiatives will be implemented to increase landholder awareness of safe and efficient operation of their Onsite Sewage Management System.

6. WHEN IS AN APPLICATION TO COUNCIL REQUIRED?

An Application under Section 68 of the *Local Government Act 1993* must be made to Council for the installation, construction or alteration, use of an On-site Sewage Management System.

7. MINIMUM REQUIREMENTS FOR AN APPLICATION FOR AN ONSITE SEWAGE MANAGEMENT SYSTEM?

When submitting an application to Council for a new On-site Sewerage Management System, or an alteration of an existing system, the following documentation is required:

- (i) Completed Hilltops Council On-site Sewage Management System Application Form,
- (ii) Payment of Fee (as nominated in Councils Management Plan),
- (iii) Plan of septic tank(s), collection well or Aerated Wastewater Treatment Tank(s),
- (iv) Geotechnical Assessment Report (where required),
- (v) Certification that the proposed system is approved by NSW Health.
- (vi) Site Plan indicating the location of the On-site Sewage Management System and land application area. The site plan must show the location and distance of the On-site Sewage Management System and land application area indicating:
 - a. Distance to all neighbouring boundaries, permanent and intermittent watercourses, waterbodies and domestic groundwater bores and wells, and
 - b. Distance from dwellings and outbuildings (including pools and domestic water tanks), and
 - c. Any landscaping design required for surface irrigation fields.

8. GEOTECHNICAL REPORTS

To further demonstrate satisfactory effluent disposal, a Geotechnical report will be required. Circumstances where a Geotechnical report will be required:-

- (i) Supplementing a Development Application for a subdivision for the creation of a lot less than 10,000m² for the purpose of a dwelling,
- (ii) If the property is constrained through soil type, proximity to a watercourse or waterbody or high ground water level.
- (iii) For all properties less than 10,000m²
- (iv) Land identified as an Environmentally Sensitive Area



9. SEPTIC TANK AND ABSORPTION TRENCH, TRANSPIRATION BED OR REED BED

A Septic Tank and Land Application Area is the most common form of On-site Sewage Management System. The most common Land Application Area are in the form of an absorption trench or transpiration bed.

9.1 Performance Criteria

Effluent disposal systems are to be designed and constructed in such a manner which minimises adverse impacts on the environment and to minimise risk to public health and avoid odour or nuisance impacts on neighbouring lands.

9.2 Site Evaluation

The evaluation of the site for the suitability of a septic tank and Land Application Area shall incorporate the following –

- (i) Depth and permeability of the soil;
- (ii) Proximity to land mapped as flood prone or to any land considered to be environmentally sensitive;
- (iii) Designation of an alternate area to enable the disposal system to be duplicated if required;
- (iv) The risk of prejudicing adjoining property, underground water supplies and the like, by seepage or run-off;
- (v) Any seasonal changes in groundwater level and absorptive capacity of the site;
- (vi) The general climate and its effect on evaporation or transpiration from the site.

9.3 Septic Tank Size and Accreditation

Septic Tanks must have an accreditation certificate issued by NSW Health. This can be confirmed through the NSW Health website.

9.4 Septic Tank and Land Application Area Buffer Distances

To ensure the ongoing protection of public and environmental health, buffer distances are to be maintained from the septic tank and Land Application Area to boundaries and other land constraints. Buffer distances are as follows:-

	Distance
Septic tank and absorption area to permanent surface waters (eg. river)	100m
Septic tank and absorption area to groundwater water source	250m
Septic tank and absorption area to intermittent waterways and downstream of dams	40m
Absorption area to property boundary	4m from property boundary
Absorption area to swimming pools, driveways and buildings	4m (up-gradient from property boundary) 3m (down-gradient from property boundary)



9.5 System maintenance

The sludge level will build up in septic tanks over a period of time and will require 'desludging' at the appropriate time. The frequency of desludging is dependent upon the type of system and the number of people using the system. Do not over pump a system as this reduces performance and can be the cause of issues related to smell.

Any pump out of the septic tank must be undertaken by a licensed operator and disposed to a licensed waste management facility.

The Land Application Area must be regularly maintained by ensuring an adequate coverage of vegetation. To improve transpiration rates, vegetation must be maintained to ensure it does not become overgrown.

10. AERATED WASTEWATER TREATMENT SYSTEM (AWTS)

An AWTS is a system that treats wastewater to a higher standard than a standard septic tank. After primary treatment, the effluent is then aerated and chlorinated to enable disinfection of the effluent. The secondary-treated effluent is then pumped for surface or subsurface irrigation.

10.1 Performance Criteria

An effluent disposal system and Land Application Area shall be designed and constructed to ensure the treated effluent is discharged in a manner which minimises impact on the environment and is in accordance with manufacturer's specification.

- (i) The effluent disposal area shall be designed and constructed in a manner to prevent risk to public health.
- (ii) Compliance with the terms and conditions of accreditation of the particular system chosen.
- (iii) Consistently to the consent and approved plan

10.2 Aerated Wastewater Treatment System and Land Application Buffer Distances

To ensure ongoing protection of public and environmental health, buffer distances are to be maintained from the AWTS and Land Application Area (above surface or sub-surface irrigation). Buffer distances are as follows:-

	Distance
AWTS and land application area to permanent surface waters (eg. river)	100m
AWTS and land application area to groundwater water source	250m
AWTS and land application area to intermittent waterways	40m
Above Surface Spray Irrigation to Dwellings	15m
Above Surface Spray Irrigation and Sub Surface Irrigation to property driveways and boundaries	6m (up-gradient from property boundary and driveways) 3m (down-gradient from property boundary and driveways)
Above Surface Spray Irrigation to paths and walkways	3m
Above Surface Spray Irrigation and Sub Surface Irrigation to swimming pools	6m



10.3 Ongoing Maintenance and Servicing

To ensure efficient and safe ongoing use of the AWTS, the following ongoing maintenance is required:-

- (i) The AWTS system must be serviced on a quarterly basis by a licensed service contractor. The owner of the AWTS must have a service contract with the service agent to undertake quarterly servicing and maintenance.
- (ii) A copy of the quarterly service report must be forwarded to Council by the service contractor or operator of the system at the end of each service.

11. SEPTIC TANK, COLLECTION WELL AND PUMP TO SEWER

In certain circumstances, a Land Application Area may not be achievable. In these circumstances, effluent may be stored in a collection well before discharge to Councils sewage system. However, this is dependent on the proximity of the sewage system and approval by Council Water and Waste Water Engineers.

In addition to the requirements noted in Section 7, the following is required:-

- (i) A visible and audible alarm to be connected to the collection well to identify high effluent levels and pump failure.

12. SEPTIC TANK, COLLECTION WELL AND PUMP TO TRENCH

In certain circumstances, a Land Application Area will be up gradient from the septic tank. In this circumstance, effluent may be stored in a collection well before being pumped up gradient to the Land Application Area.

In addition to the requirements noted in Section 7, the following is required:-

- (i) A visible and audible alarm to be connected to the collection well to identify high effluent levels and pump failure.

13. COMPOSTING WASTE SYSTEM

Composting toilets (also known as humus closets or biological toilets) are systems which rely on composting by micro-organisms to decompose human waste, paper and other materials into humus.

Buffer Distances

	Distance
Composting Chamber and Land Application Area to permanent surface waters (eg. river)	100m
Composting Chamber and Land Application Area to intermittent waterways	40m
Composting Chamber and Land Application Area to property boundaries	6m (up-gradient from property boundary) 3m (down-gradient from property boundary)



14. PUMP-OUT SYSTEM

In certain circumstances, a pump-out system may be required by Council. However, this will only be permitted when other options have been explored and deemed unsuitable.

In addition to the requirements described under Section 7, the additional requirements of a pump-out system are:-

- (i) An audible and visual alarm is to be fitted to the septic tank to indicate high effluent levels.
- (ii) An agreement must be entered into for the waste to be collected by a licenced contractor at a frequency to be determined by the nature of use of the facility.
- (iii) Waste is to be disposed to a licenced waste management facility.
- (iv) Receipts of the pump out and disposal of the waste must be kept and be able to be forwarded to Council upon request.

15. GREYWATER SYSTEMS

Greywater systems may be used in association with an existing composting toilet or with an existing septic tank and Land Application Area.

A greywater system is a system that treats waste greywater to enable it to be pumped for surface or subsurface irrigation.

15.1 Performance Criteria

A Land Application Area shall be designed and constructed to ensure the treated effluent is discharged in a manner which minimises impact on the environment and is in accordance with manufacturer's specification.

- (i) The effluent disposal area shall be designed and constructed in a manner to prevent risk to public health.
- (ii) Compliance with the terms and conditions of accreditation of the particular system chosen.
- (iii) Consistently to the consent and approved plan

15.2 Greywater System and Land Application Buffer Distances

To ensure ongoing protection of public and environmental health, buffer distances are to be maintained from the greywater system and Land Application Area (above surface or sub-surface irrigation). Buffer distances are as follows:-

	Distance
Land Application Area to permanent surface waters (eg. river)	100m
Land Application Area to intermittent waterways	40m
Above Surface Spray Irrigation and Sub Surface Irrigation to property driveways and boundaries	6m (up-gradient from property boundary and driveways) 3m (down-gradient from property boundary and driveways)
Above Surface Spray Irrigation to paths and walkways	3m
Above Surface Spray Irrigation and Sub Surface Irrigation to swimming pools	6m



15.3 Ongoing Maintenance and Servicing

To ensure efficient and safe ongoing use of the Greywater System, the following ongoing maintenance is required:-

- (i) The system must be serviced on a quarterly basis by a licensed service contractor. The owner of the Greywater system must have a service contract with the service agent to undertake quarterly servicing and maintenance.
- (ii) A copy of the quarterly service report must be forwarded to Council by the service contractor or operator of the system at the end of each service.

16. OTHER SEWAGE MANAGEMENT SYSTEMS

Other systems of sewage management may be suitable. Systems not noted within this policy will be subject to an application under Section 68 of the *Local Government Act 1993* and must comply with the requirements of Australian Standard.

The system must have current accreditation by NSW Health. Information to be included in an application is included in Section 7 of this Policy.

17. RISK ASSESSMENT

Council has adopted a system of risk assessment; the level of risk will determine the frequency of inspection. When assessing the level of risk, the Council Officer will utilise the stated risk assessment criteria together with information provided by the householder on their application, planning documents and information from relevant authorities.

17.1 Risk Criterion

High Risk systems located:-

- (i) Within 2 km upstream of a town water intake point, or,
- (ii) Any other location at the discretion of Council

Medium Risk systems located:-

- (i) On a lot/s that is within single ownership of less than 10,000 square meters that is connected to reticulated water, or,
- (ii) On a lot/s that is within single ownership of less than 2,000 square meters that is not connected to reticulated water, or,
- (iii) Within an environmentally sensitive area, or,
- (iv) Connected to a community facility, or,
- (v) Within an On-site Sewage Management System is located within 150m of a permanent watercourse.

Low Risk – all other systems that are not included as high or medium risk.

18. INSPECTION FREQUENCY

The risk assessment determines the frequency of inspection. Inspections will be as follows:

- **High risk** systems to be inspected yearly.
- **Medium risk** systems to be inspected every three (3) years.
- **Low risk** systems to be inspected on the receipt of a complaint, when a development application for the site is received or by a random audit as set out by the monitoring program.



Aerated Wastewater Treatment Systems (AWTS) will be inspected by Council according to the level of risk assigned above. The AWTS must be inspected and serviced according to the manufacturer's instructions on a quarterly basis (ie, four (4) times per year).

19. MONITORING PROGRAM

The following processes will be put into place to ensure that both existing and proposed systems are adequately monitored:

- (i) Inspections are to be carried out on existing sites where deemed necessary by the nominated council officer.
- (ii) On-going inspections of on-site sewage management systems to be carried out in accordance with the inspection regime determined at the time of initial risk assessment.
Aim to inspect all on-site sewage management complaints within three business days of notification.
- (iii) Where inspections indicate faulty, defective or unhealthy systems notify the owner/occupier and then negotiate with the householder to develop a site-specific sewage management plan which will resolve the identified problem/s.
- (iv) Issue orders/notices where necessary for faulty, defective, unhealthy on-site sewage management systems. (Section 124 Local Government Act, 1993).
- (v) Where conditions of approval are continually not complied with, Council may revoke the approval.

20. EMERGENCY RESPONSE PROGRAM

Response procedures by Council in the case of emergencies shall be:

- (i) Inspection of site within three business days;
- (ii) Contact the owner/occupier of the property affected by the emergency;
- (iii) Issue a Management Plan, Notice of Intention to Serve an Order, Order or Penalty Infringement Notice.



Appendix A – Standard Operating Conditions for Septic Tank and Absorption Trench

The following standards will apply to the operation of existing septic tanks with absorption trenches or transpiration areas:

1. All systems must have a current approval to operate with Council under Section 68 of the Local Government Act, 1993.
2. Check the sludge levels in the septic tanks on an annual basis and if necessary, have the tank desludged by a licenced contractor.
3. All stormwater/surface water must be diverted away from the waste disposal area.
4. There must be no surface ponding or run-off of treated wastewater from the waste disposal area.
5. Inspect the waste disposal area on a regular basis to ensure it is operating effectively. Signs of inefficient operation are:
 - Damp and boggy ground.
 - Surface ponding and run-off of wastewater.
 - Poor vegetation growth.
 - Unusual odours.
6. Avoid allowing children or pets from playing on waste disposal areas.
7. Do not water waste disposal areas with a sprinkler and do not grow any plants for human consumption in waste disposal areas.
8. Maintain waste disposal areas by regularly mowing the grass to enable optimum transpiration.
9. Avoid disposing the following into the system:
 - Bleaches, disinfectants, whiteners, etc.
 - Nappies, sanitary napkins, condoms, etc.
 - Fats and oils.
 - Waste from garbage grinders.



Appendix B – Standard Operating Conditions for Aerated Wastewater Treatment System (AWTS)

The following standards will apply to the operation of new and existing AWTS systems:

1. All systems must have a current approval to operate with Council under Section 68 of the Local Government Act, 1993.
2. All stormwater/surface water must be diverted away from the irrigation area.
3. There must be no surface ponding and run-off of treated effluent from the irrigation area.
4. Do not plant large trees or plants that will shade the irrigation disposal area.
5. Avoid allowing children or pets from playing on waste disposal areas.
6. Maintain irrigation areas by regularly mowing the vegetation.
7. The AWTS is to be serviced on a quarterly basis to ensure system is operating correctly and that the correct level of disinfection is being achieved in the treated effluent. (Note: a copy of the quarterly service record must be submitted to Council by the service contractor).
8. Avoid disposing the following into the system:
 - Bleaches, disinfectants, whiteners, etc.
 - Nappies, sanitary napkins, condoms, etc.
 - Fats and oils.
 - Waste from garbage grinders.
9. Inspect the waste disposal area on a regular basis to ensure that it is operating properly. Signs of inefficient operation are:
 - Damp and boggy ground.
 - Surface ponding and run-off of irrigated effluent.
 - Poor vegetation growth.
 - Unusual odours.
10. Should the AWTS's alarm be triggered, the service contractor must be contacted immediately.
11. Within the designated irrigation area, a sign must be displayed at all times with the following text:

"WARNING: RECLAIMED EFFLUENT. NOT SUITABLE FOR HUMAN CONTACT/CONSUMPTION."
12. No plants used for growing food for human consumption shall be irrigated with the reclaimed effluent.
13. The irrigation for the reclaimed effluent must be installed in such a manner so that it will not discharge into any watercourse or onto any land other than its related effluent application area.
14. The main irrigation line for the AWTS system must be buried to a depth of at least 100mm between the AWTS tank and the irrigation area. Where it is proposed to use more than one irrigation area, a valve system shall be installed in such a manner so that at least one irrigation area is available for use at all times. A minimum of 3 irrigation sprinklers must be connected to the irrigation line.
15. The AWTS must be fitted with both an audible alarm and a visual alarm (ie flashing light) to alert of any malfunction. Should a malfunction occur, the service contractor must be contacted. The visual alarm must only be able to be re-set by the service contractor.



Appendix C – Standard Operating Conditions for Collection Well and Pump to Sewer

The following standards will apply to the operation of a septic tank and collection well:

1. The system must have a current approval to operate with Council under Section 68 of the Local Government Act, 1993.
2. The sludge level within the septic tank must be regularly monitored. Excess sludge within the septic tank must be pumped out by licenced operator and disposed to a licenced facility.
3. The collection well must have a visual and audible alarm connected to the collection well. The visual and audible alarm must be designed to detect high effluent levels within the collection well.



Appendix D – Standard Operating Conditions for Composting Toilets

The following standards will apply to the installation and operation of composting toilets:

1. All composting toilet systems to be installed must have a current accreditation from NSW Health.
2. If required by the system installed, the composting toilet must be serviced on an annual basis by a licensed contractor. The annual service should include a check of the operation of the ventilator fan and the amount and spread of the compost within the composting chamber. A service certificate must be submitted to Council by the servicing contractor or operator.
3. When removed from the composting chamber, the composted humus material must be buried within the boundaries of the property whereon the composting toilet is located.
4. The composted humus material must be buried at least 6 metres from any boundary, water course, drainage or supply channel or any other water body.
5. The composted humus material must be covered with at least 100mm of cover soil.
6. The compost must not be buried in an area that is used for growing food or plants for human consumption unless:
7. Always ensure the toilet lid is closed when the toilet is not in use to ensure proper aeration of the compost pile and to control vermin infestation, such as fly breeding.
8. To assist in the composting process, organic and bulking material may be added when necessary.
9. Moisture and temperature conditions must be maintained to ensure that optimum conditions for the composting process.
10. Records of servicing and commissioning of composting chambers must be maintained.



Appendix E – Standard Operating Conditions for Greywater Treatment System

The following standards will apply to the operation of new and existing Greywater Treatment Systems:

1. All systems must have a current approval to operate with Council under Section 68 of the Local Government Act, 1993.
2. All stormwater/surface water must be diverted away from the irrigation area.
3. There must be no surface ponding and run-off of treated effluent from the irrigation area.
4. Do not plant large trees or plants that will shade the irrigation disposal area.
5. Avoid allowing children or pets from playing on waste disposal areas.
6. Maintain irrigation areas by regularly mowing the vegetation.
7. The Greywater treatment system is to be serviced on a quarterly basis (or as described by the product manufacturer) to ensure system is operating correctly and that the correct level of disinfection is being achieved in the treated effluent. (Note: a copy of the quarterly service record must be submitted to Council by the service contractor).
8. Inspect the waste disposal area on a regular basis to ensure that it is operating properly. Signs of inefficient operation are:
 - Damp and boggy ground.
 - Surface ponding and run-off of irrigated effluent.
 - Poor vegetation growth.
 - Unusual odours.
9. No plants used for growing food for human consumption shall be irrigated with the reclaimed effluent.
10. The irrigation for the reclaimed effluent must be installed in such a manner so that it will not discharge into any watercourse or onto any land other than its related effluent application area.