

# Dungog Shire Onsite Sewage Management Policy



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### Appendix 1 – Definition of major and Minor Breaches

## 1. LEGISLATION AND GUIDELINES

This section contains an outline of legislation, guidelines, standards and investigations that must be considered by Council in the regulation of new and existing On-site Sewage Management Systems (OSMS).

**Table 1: Applicable Legislation**

Legislation	Relevance or Purpose to On-site Sewage Management
Local Government Act, 1993	Legislative instrument applicable to all activities and functions relevant to On-site Sewage Management Systems
Local Government (General) Regulation, 2005	Sets standards and conditions for assessment, installation and operation of on-site sewage management systems
Hunter Water (special areas) Regulation, 2003	Defines drinking water catchment areas and conditions relating to sewage disposal within these special areas.
Environmental Planning and Assessment Act, 1979	Legislative instrument governing the LEP and DCP
Local Environment Plan 2014	The LEP 2014 is a statutory instrument that sets out the land use zones and broad development controls for development within the LGA.
Development Control Plan (as amended from time to time)	The DCP is a suite of documents that provide practical information to support development that retains and enhances the natural and heritage values of the DSC LGA. The DCP applies to all land zoned under the LEP.
Water Industry Competition Act, 2006	Legislative instrument applicable to installation of OSM systems greater than 2 dwellings – generally commercial and industrial installations relating to recycling or sewer mining. Managed by IPART.

Table 2: Applicable Standards, Guidelines and Reports

Standard/guideline/other document	Purpose
Environment and Health Protection Guidelines – On-site Sewage Management for Single Households	Guidelines compiled to assist councils in regulating small to medium on-site sewage management systems.
Various State Government Department Guidelines	Use of Effluent by Irrigation (Dept. OEH) Use and Disposal of Biosolid Products (Dept. OEH)
Australian standards	<p><b>AS/NZ 1546</b></p> <p>A set of standards prescribing performance requirements and performance criteria for septic tanks and treatment systems. They specify technical means of compliance and provide test specifications that enable septic tanks to be manufactured to comply with the performance requirements and criteria.</p> <p><b>AS/NZ 1547: 2000 – on-site domestic waste water management</b></p> <p>A reference document providing procedures, guidance and information covering site and soil assessment, treatment systems and disposal areas.</p>
Dungog Shire Council On-site Sewage Management Technical Manual, BMT WBM, 2014	<p>The main objectives of the study were:</p> <ul style="list-style-type: none"> <li>• Produce land capability maps;</li> <li>• Identify sustainable system densities and minimum allotment sizes;</li> <li>• Provide a technical/scientific justification for restricting un-sewered development.</li> <li>• Produce a framework for assessing and classifying land according to risk.</li> </ul>
Dungog Shire Council On-site Sewage Development Assessment Framework (DAF), BMT WBM 2014	The framework by which all new and replacement On-site Sewage Management Systems are assessed. The document also defines criteria and standards relating to treatment systems and disposal areas.
NSW Health accreditation for domestic On-site Sewage Treatment Devices	NSW health is responsible for accrediting human waste treatment or storage devices that are intended to receive domestic wastewater or human waste. Accreditation is mandatory for commercially manufactured units and for commercially distributed standard designs of the types specified in the regulations.

## 2. EXISTING CONDITIONS

Dungog Shire Council has an area of approximately 2248 square kms and is bordered by the local Government areas of Port Stephens and Maitland to the south, Singleton to the west, Great Lakes to the East and Gloucester to the North. The LGA includes a variety of landscapes including three rivers and associated catchment areas, bushland, forestry and National Park along with cleared farmlands surrounding towns and villages.

The potential impact of on-site sewage management systems on water quality is of particular relevance within the river catchments, particularly the drinking water catchment of the Williams River which provides the major drinking water source to the Hunter Region.

The Council area is traditionally rural with the main urban population centres in the towns of Dungog, Clarence town, Paterson, Vacy and Gresford. Of these, only Dungog and Clarence town are sewerred.

### 3. OPERATIONAL FRAMEWORK

This section of the Strategy sets out the processes for the issuing of Approvals to Operate, new system installations and the classification and inspection of On-site Sewage Management Systems. The operational Strategy outlined is designed to provide an effective and self-funding approvals and monitoring framework for On-site Sewage Management in the Dungog LGA. The approach taken is based on the principles of protection and enhancement of public health and the environment through the cooperative management of On-site Systems by all stakeholders.

#### A. DEVELOPMENT ASSESSMENT FRAMEWORK (DAF)

During 2014, Dungog Shire Council, using a monetary contribution from Hunter Water as part of the Septic Improvement and Rectification Project (SIRP), engaged a consultant to undertake a comprehensive study relating to On-site Sewage Management in the DSC LGA.

The project aims were to:

- Develop land capability maps through;
  - Development of land capability assessment logic
  - GIS analysis and creation of land capability map
  - Apply land capability to Council policy
- Develop sustainable system densities and allotment sizes
- Prepare project outputs;
  - Technical manual - This document provides the technical basis for:
    - On-site sewage management hazard mapping
    - Minimum allotment size
    - Maximum lot density
    - Rationale for acceptable solution tables
    - DAF design procedure, and
    - Cumulative impact assessment procedures
  - Development Assessment Framework (DAF) - This document provides Council officers, applicants, consultants and installers with the necessary information to undertake an appropriate level of site and environmental investigation, system design selection and sizing and system installation.

Both the DAF and Technical Manual are separate documents that are called up by this Strategy. The Technical Manual provides the technical and scientific basis for the DAF.

The DAF shall be used to determine investigation level, system applicability and minimum site and environment assessment requirements for the installation of new and the replacement of existing systems and in the assessment of applications for the subdivision of land in un-sewered areas.

The basis for the DAF is the classification of land into four risk categories (low, medium, high and very high) according to defined topographical, environmental, soil and climate factors. The more constrained the property the higher the hazard class. The level of assessment required for development applications is a function of the hazard class identified for the property. The higher the hazard class the greater the level of assessment required.

Two maps have been developed defining the hazard classes. One map relates to the installation of an on-site sewage management system on a single allotment with a second map defining hazard classes when proposing subdivision of land. Property owners, consultants and installers can access these maps to identify the hazard class applicable to the lot identification details. Assessment requirements, developed specifically for each hazard class, are used by the installer or consultant to undertake an appropriate level of investigation and prepare and submit the application with the necessary information.

## B APPROVAL TO OPERATE

An approval to operate is required in accordance with section 68 and 68A of the Local Government Act, 1993. The operation of a system of sewage management is an activity that requires an Approval from Council (item 10 of Part F of the table in Section 68 of the Act).

**Table 4: Approval to Operate Key Points**

Item	Key Points
Legislative instruments	<ul style="list-style-type: none"> <li>• Local Government Act, 1993 (Section 68/68A)</li> <li>• Local Government (General) Regulations, 2005</li> </ul>
Approval to Operate	<ul style="list-style-type: none"> <li>• Required by all on-site systems with a capacity &lt;2500EP or 750kL/day and not covered under another statutory licence</li> <li>• Rests with the owner or operator not the system or property</li> </ul>
Period	<ul style="list-style-type: none"> <li>• Valid for 12 months</li> <li>• Currently operates 1<sup>st</sup> July – 30<sup>th</sup> June</li> </ul>
Renewal	<ul style="list-style-type: none"> <li>• Renewed annually</li> <li>• Application not required</li> </ul>
Fee	<ul style="list-style-type: none"> <li>• Included in land rates assessment notice</li> <li>• Fee in accordance with the annual Schedule of Fees and Charges</li> </ul>
Conditions	<ul style="list-style-type: none"> <li>• Each approval to operate is conditioned</li> <li>• Conditions relate to operational, environmental and health related objectives and are specific to the system type</li> </ul>
Modification to Approval	<ul style="list-style-type: none"> <li>• Approvals can be modified in accordance with s109 of LGA</li> <li>• The approval and/or conditions may be modified if deemed necessary as a result of information obtained from an inspection</li> </ul>
Change of ownership	<ul style="list-style-type: none"> <li>• Approval re-issued to new owner/operator upon request.</li> </ul>

## C. NEW INSTALLATIONS

The installation, construction or alteration of a waste treatment device or a human waste storage facility is an activity that requires an approval from the local authority in accordance with the Local Government Act 1993.

**Table 5: Approval to Install Key Points**

Item	Key Points
Legislative Instruments and Policies	<ul style="list-style-type: none"> <li>• Local Government Act, 1993 (Section 68)</li> <li>• Local Government (General) Regulations, 2005</li> <li>• Protection of the Environment and Operations Act, 1997</li> <li>• SEPP's 14, 62, 71</li> <li>• WICA, 2006</li> <li>• DSC Local Environment Plan, in-force</li> <li>• DSC Development Control Plan, in-force</li> <li>• DSC Development Assessment Framework</li> <li>• DSC On-site Sewage Management Technical Manual</li> </ul>
Standards and Guidelines	<ul style="list-style-type: none"> <li>• Australian Standard AS1546</li> <li>• Australian Standard AS1547:2000</li> <li>• Environment and Health Protection Guidelines</li> <li>• The NSW State Groundwater Policy – Framework Documents</li> <li>• Use of Effluent by Irrigation, EPA</li> <li>• NSW Management of Private Recycled Water Schemes</li> <li>• Grey water reuse in seweraged single household residential premises</li> </ul>
Applicability	<ul style="list-style-type: none"> <li>• Install, alter or construct a waste treatment device or human waste storage facility (section 68 Part C 5).</li> <li>• Systems with a capacity &lt;750kL/day or &lt;2500EP.</li> <li>• Includes pump to sewer systems.</li> </ul>
Documentation	<ul style="list-style-type: none"> <li>• Application Form</li> <li>• Sufficient documentation required for adequate assessment</li> <li>• Division 4 Local Government (General) Regulations, 2005</li> <li>• Development Assessment Framework (DAF)</li> </ul>

Table 5 con't: Approval to Install Key Points

Item	Key Points
Fee	<ul style="list-style-type: none"> <li>In accordance with schedule of fees and charges</li> </ul>
Valid	<ul style="list-style-type: none"> <li>5 years from date of approval</li> </ul>
Inspections	<ul style="list-style-type: none"> <li>Site (pre-approval)</li> <li>Installation (disposal area)</li> <li>Final on completion</li> <li>Other inspections as required</li> </ul>
Satisfactory Final Inspection	<ul style="list-style-type: none"> <li>Issue of Approval to Operate</li> </ul>
Unsatisfactory Final Inspection	<ul style="list-style-type: none"> <li>Remedial works required.</li> <li>Local Government Act, 1993 (Section 124)</li> </ul>

#### D. RISK CATEGORIES & INSPECTION FREQUENCY

All existing systems are risk classified according to specific criteria. The risk classification provides a mechanism for determining inspection frequency and the potential health and environmental risks. Three risk classifications are used (refer table 6).

Table 6: OSMS Risk Categories

Hazard Class	Risk Classification	Indicative Inspection Frequency (internal use only)
Very High	High	Annually or 2 years
High	High	2 years
Medium	Medium	3 years
Low	Low	5 years
Low	Low(TS) Functioning secondary treatment system	By Exception Only (complaint, or major fault identified on service report)

Systems will be classified according to the hazard class map for single allotments. The risk criterion in **Table 7** below provides a summary of the logic used to compile the hazard class map. With particular installations there may be additional issues to consider as part of the risk categorisation process. In some circumstances not ALL criteria within a particular category may apply to either the system or location. In this instance the officer performing the classification must make a decision whether there is sufficient reason to move the system into a higher or lower risk category. Generally though, classifying a system to a higher or lower risk category based on one non-complying criterion would not be warranted. (Note: Systems classified as very high according to the hazard class map are classified high with inspections annually or every 2years).

Table 7: OSMS Risk Classification Criteria

Indicative Criteria	High Risk	Medium Risk	Low Risk
Land Area	<2000m <sup>2</sup>	2000 – 4000m <sup>2</sup>	>4000m <sup>2</sup>
Soil type	Clay or Sand	Loam	Loam
Soil Structure	Weak/massive	Moderate structure	Good structure
Flooding	Flood prone	Not flood prone	Not flood prone
System Type	Primary	Primary Secondary	Secondary or better
Depth to Groundwater or Hardpan	<0.6 metre	0.6 – 1.0 metres	>1 metres
Slope	>20%	10 – 20%	<10%
Water Catchment	Yes	No	No
Buffer distances	Not comply	Partial compliance	Comply

A category known as Low(TS) will be used for systems meeting the following criteria:

- The system is a secondary or advanced secondary treatment system;
- The system has been installed in accordance with a valid approval and is operating in accordance with the conditions of the approval to operate;
- The system is being serviced under a maintenance agreement by a suitably qualified and experienced servicing agent;
- There are no outstanding maintenance issues identified on a service report.

This category is not included on the routine inspection program but managed by exception. Inspections may be undertaken should a problem be identified through a complaint or unsatisfactory service report at the discretion of the assessing Council officer.

## E. REVIEW OF AND CHANGES TO CATEGORIES OR RISK

In order to encourage appropriate management and maintenance of on-site sewage management systems Council provides for the re-categorisation of systems from the high and medium risk categories. This will involve re-categorisation of systems from high risk to medium risk where the continuing operation of a particular installation has been shown, to Council's satisfaction, over 2 consecutive programmed inspections, to be in accordance with the performance standards set out in this strategy. Similarly medium risk installations whose continuing operation has been shown, over 2 consecutive programmed inspections, to be in accordance with the performance standards set out in the strategy will be re-categorised to low risk.

Council officers may increase the risk rating of any installation after inspection if that inspection reveals that more frequent monitoring of that system is required.

Council will advise the owners concerned in writing of the outcome of requests for re-categorisation.

## F. INSPECTION PROCESS

Council has developed an inspection program for existing on-site systems to ensure those systems meet environmental and health performance objectives set out in this Strategy and in the Environmental and Health Protection Guidelines over the long term. The program involves the monitoring of existing service documentation and programmed on-site inspections.

At present there are approximately 3500 on-site sewage management systems in the Dungog LGA. In order to prioritise and effectively carry out an ongoing inspection program, systems are classified according to risk. Inspections are then carried out at an interval appropriate to the individual systems risk assessment subject to adequate resourcing.

Council will inspect all systems in the LGA with the exception of those identified as Low(TS). Properties will be inspected to the schedule outlined above in accordance with the available resources of Council and individual systems assessed on performance standards as stated in the EH&P Guidelines. An audit report is completed for each inspection with a copy of the report forwarded to the property owner or designated operator. If changes are made to conditions as a result of the inspection, owners are issued with an amended Approval to Operate (with conditions attached).

Table 8: OSMS Inspection Process

Item	Criteria
Which Systems?	<ul style="list-style-type: none"> <li>All domestic and commercial on-site systems holding an active approval to operate</li> </ul>
Exemptions	<ul style="list-style-type: none"> <li>Systems classified as Low (TS)</li> </ul>
When undertaken?	<ul style="list-style-type: none"> <li>In accordance with risk classifications</li> <li>If complaint received</li> <li>If requested by owner/operator</li> <li>Request for pre-purchase inspection (ie impending sale of the property)</li> </ul>
Who performs?	<ul style="list-style-type: none"> <li>Councils Environmental Health Officers</li> <li>Septic Improvement and rectification project officer. (SIRP)</li> <li>Notification of inspection in accordance with LGA is sent to owners/operators</li> <li>Signed authority to enter property provided with pre-purchase inspection request</li> </ul>
Why inspect?	<ul style="list-style-type: none"> <li>To determine operating status and compliance with standards and guidelines</li> <li>Assess risk to environment and public health</li> </ul>
Fee	<ul style="list-style-type: none"> <li>No charge for routine inspections</li> <li>Pre-purchase inspection in accordance with schedule of fees and charges</li> </ul>
Records	<ul style="list-style-type: none"> <li>Audit sheets maintained electronically</li> </ul>

- Typed report sent to owner/operator
- Pre-purchase inspection report to applicant

Table 8 con't: OSMS Inspection Process

Item	Criteria
Pumpout Systems (tanker removal)	<ul style="list-style-type: none"> <li>Pump out records requested during investigations only. Comparisons made with water usage for property to determine adequate servicing frequencies.</li> </ul>
Aerated wastewater treatment systems (AWTS)	<ul style="list-style-type: none"> <li>Servicing records obtained by contractors and entered into electronic database.</li> <li>Data maintained detailing servicing frequency.</li> </ul>
Pump to sewer systems	<ul style="list-style-type: none"> <li>Classified as an on-site sewage system in accordance with regulations.</li> <li>Inspected to determine compliance with Hunter Water specifications</li> </ul>

## G. UPGRADING FAILING SYSTEMS

Inspections of on-site sewage management systems are conducted to ensure that systems are installed and operated in accordance with the conditions specified in any Council approval. Beyond system design and installation, those approval conditions relate primarily to the performance standards specified in the regulations and this policy.

System failure is deemed to have occurred when a system fails to achieve prescribed performance standards resulting in adverse impacts on public health or the environment. **Appendix 1** provides a methodology for defining minor and major breaches for treatment systems and disposal areas. **Table 9** provides a methodology for prioritising identified issues, determining an appropriate response and provides tools that may be used to assist in investigating and addressing the issue.

The upgrading of a failing system shall be undertaken in accordance with:

- Legislative requirements, and
- The Dungog Shire Development Assessment Framework

## H. COMPLAINTS ABOUT FAILING SYSTEMS

A member of the public who has a concern with the operation of an on-site sewage management system may approach Council about the problem. Council is the appropriate authority to regulate the operation of on-site sewage management systems to ensure that risks to health and the environment are addressed.

Council will investigate complaints relating to system failures irrespective of the prioritisation classification applied to the situation – found in **Table 9**.

This inspection may replace the next scheduled inspection for any system that is the subject of a complaint and where as a result of that inspection Council requires the owner/operator to take some action. Changes may also be made to the risk categorisation of systems as a result of any complaint investigation.

It is the responsibility of the owner or occupier of the premises to ensure that on-site systems are designed, installed and managed so that environmental nuisance/damage does not occur and there is no risk to public health from the operation of the system.

Owners should ensure that other occupiers of the premises eg tenants, are aware of the systems operation and maintenance requirements. If a system is defective and cannot be corrected by the proper operation and maintenance, householders should report this to Council so that immediate action can be taken to address the problem.

**Table 9** provides a methodology for prioritising identified issues, determining an appropriate response and provides tools that may be used to assist in investigating and addressing the issue.

**Table 9: OSMS Prioritisation Methodology**

Situation Classification		
Critical	Major	Minor
<b>Situations</b> <ul style="list-style-type: none"> <li>Significant failure of the wastewater treatment system or disposal area whether intentional or unintentional</li> <li>Significant threat to the environment and public health</li> </ul>	<b>Situations</b> <ul style="list-style-type: none"> <li>Major failure of the wastewater treatment system, component or disposal area</li> <li>Moderate to major threat to the environment and public health</li> </ul>	<b>Situations</b> <ul style="list-style-type: none"> <li>Minor or insignificant problem with the wastewater treatment system, component or disposal area</li> <li>Minor or no threat to the environment and public health</li> </ul>
<b>Responses</b> <ul style="list-style-type: none"> <li>Immediate action by Council is to commence</li> <li>May need multiple Council staff to respond</li> <li>May need consultation with EPA staff</li> <li>Same day response</li> <li>Immediate communication with system owner / operator</li> <li>Definite follow up action by Council staff</li> </ul>	<b>Responses</b> <ul style="list-style-type: none"> <li>Important but not urgent.</li> <li>Action by Council should commence within 5 business days</li> <li>May need immediate communication with system owner/operator if necessary</li> <li>Would involve follow up action by Council staff</li> </ul>	<b>Responses</b> <ul style="list-style-type: none"> <li>Needs attention by owner/operator but is not urgent</li> <li>Minimal intervention by Council staff</li> <li>May be remedied with discussion with owner or operator</li> <li>May need a follow up response to ensure the problem does not escalate</li> <li>Educational material may be appropriate</li> </ul>
<b>Tools</b> <ul style="list-style-type: none"> <li>Water and/or soil samples. Chemical and microbiological testing</li> <li>Photographic evidence</li> <li>Detailed notes</li> <li>Interviews with relevant persons</li> <li>POEO – Prevention Notice, Clean-up Notice</li> <li>Legal action if warranted</li> </ul>	<b>Tools</b> <ul style="list-style-type: none"> <li>Testing of water and/or soil samples only if necessary.</li> <li>Photographic evidence if necessary</li> <li>Detailed notes</li> <li>Local Government Act Order (s124) if necessary</li> <li>Penalty infringement notice if failure to undertake works in a reasonable time</li> </ul>	<b>Tools</b> <ul style="list-style-type: none"> <li>Routine inspection</li> <li>Audit report or letter</li> <li>Warning letter if left unresolved</li> </ul>
<b>Examples</b> <ul style="list-style-type: none"> <li>Significant failure of a wastewater system discharging effluent into a drinking water supply, waterway or stormwater drainage system</li> </ul>	<b>Examples</b> <ul style="list-style-type: none"> <li>Failing wastewater system or disposal area</li> <li>Major unresolved problem with a treatment system component</li> </ul>	<b>Examples</b> <ul style="list-style-type: none"> <li>Minor problem with a wastewater system or disposal area</li> </ul>

## **4. RECORDS, REPORTING, REVIEW & EDUCATION**

### **A. COUNCIL RECORDS**

All applications and associated information received are recorded in the appropriate electronic register (Authority) and/or hardcopy file. Such a register will include details of the applicant, the property concerned, the type of installation, the date of application, the determination of the application, the date of issue of any approval or refusal, any site inspections and any other relevant details. This register will be kept in electronic format and applications, audit sheets, special conditions attached to approvals and correspondence will be saved electronically in TRIM.

All service documentation related to AWTS quarterly maintenance that are forwarded to Council will be recorded within the Authority wastewater register (AWTS servicing data base.).

### **B. NOTIFICATION THROUGH THE 149 CERTIFICATE**

In the case of land subject to a Development Control Plan for on-site sewage management, intending purchasers will be notified of that DCP (under Section 149 clause 2 of the EP&A Act (1979)).

### **C. REPORTING**

Council's State of the Environment Report will include details of:

- The results of the on-site sewage management inspection program;
- Details regarding particular patterns of system failure related to either location criteria or system type;
- An assessment of the ongoing integration of this strategy with the other strategic planning processes of Council;
- The effectiveness of this strategy and its implementation measured against the objectives and goals set out in this strategy;

### **D .REVIEW & EVALUATION OF THIS STRATEGY**

This strategy will be the subject of ongoing review. Reviews will occur every four years in the twelve-month period after each general Council election.

### **E. EDUCATION & PROVISION OF INFORMATION**

An important part of this strategy is to ensure that all parties involved in the installation operation and maintenance of on-site sewage management systems are aware of their responsibilities and have enough information to carry them out. The

level of knowledge required will depend on the type of sewage management system and what the stakeholder needs to do.

The operation of a centralised sewage system requires limited input from the individual householder, but householders need to take an active role in the operation of on-site sewage management systems. They should have a broad knowledge of on-site sewage management principles and be able to apply that knowledge responsibly.

Householders need to have a full knowledge of:

- System operation and maintenance requirements;
- Responsibilities under the legislation;
- System selection and design of effluent application areas;
- Health risks of effluent and chemicals;
- Emergency contact numbers;
- Waste and water minimisation principles and techniques;
- Environmental impacts of wastewater.

Council will take an active role in the provision of this information to the householder and help in the development of individual management plans through this information and the approvals and inspection process. Information will be made readily available from Councils website, emailed or posted if requested or included with an inspection report.

## 5. FEES AND RESOURCING

### A. FEES

The fee schedule has been designed to provide Council and users of on-site sewage systems with a cost-effective, user pays monitoring program that provides an efficient mechanism to ensure the long term environmental and public health objectives of this strategy. The fee structure is aimed at minimising the contribution of Council general rate revenue to providing this program.

The fees are levied under s608 of the Local Government Act, 1993. These are debts on the owner / occupier rather than on the land.

Fees are revised annually.

**Table 10: OSMS Fees**

Fee Name	Details
Application to install, alter or construct a waste treatment device or human waste storage facility	<ul style="list-style-type: none"> <li>The installation of an OSMS incurs an application fee in accordance with s80 of the Local Government Act.</li> <li>Amendments to issued consents also incur an amendment fee, usually 50% of the application fee.</li> <li>Fees are set in accordance with the schedule of fees and charges.</li> </ul>
Approval to Operate	<ul style="list-style-type: none"> <li>An application for an initial approval to operate is incorporated into the application fee for installation of an OSSM, in accordance with the schedule of fees and charges.</li> </ul>
Approval to Operate Renewal	<ul style="list-style-type: none"> <li>The annual approval fee is levied on all owners of on-site systems in the Dungog LGA to cover costs of the On-site Sewage Management Program. These costs include work by clerical staff, monitoring of service documentation, inspections, complaint investigations and the provision of educational and system management advice.</li> <li>The fee is levied on an annual basis and is included as a separate item on the land rates notice.</li> </ul>
Routine/Programmed Inspections	<ul style="list-style-type: none"> <li>Routine inspections do not incur a fee.</li> </ul>
Re-inspections	<ul style="list-style-type: none"> <li>Situations involving more than one re-inspection may incur a charge in accordance with the schedule of fees and charges.</li> <li>This is at the discretion of the Council officer in consultation with management.</li> </ul>
Extraordinary Costs	<ul style="list-style-type: none"> <li>May include testing of water and soil samples.</li> <li>Charged on a cost recovery basis.</li> </ul>

## **B. RESOURCING**

The OSSM program is performed by the Environmental Services Department.

Core functions include:

- Complete programmed inspections
- Initiate action for upgrading and maintaining systems
- Ensure all owners/operators of systems obtain and renew an approval to operate
- Provide education and guidance to the community, staff and Council
- Assess applications for new installation
- Provide advice relating to OSSM in relation to Development proposals for the subdivision of land
- Monitor and assess data and reports for systems
- Undertake continuous improvement of the program
- Keep abreast of latest technologies and learning through attendance at Regional forums and training as appropriate

## 6. GLOSSARY OF TERMS

**Aerated Wastewater Treatment System (AWTS)** – Aerated wastewater treatment systems treat all household wastewater and have several treatment compartments. The first is like a septic tank, but in the second compartment air is mixed with wastewater to assist bacteria to break down solids. A third compartment allows settling of more solids and a final chlorination contact chamber allows disinfection.

**Blackwater**- human excreta and water grossly contaminated with human excreta.

**Catchment** – A catchment is an area of land with natural features such as hills or mountains, from which all run-off water flows into a creek, river, lake or ocean.

**Composting Toilets** – Composting toilets collect and treat toilet waste only. Water from the shower, sink and washing machine needs to be treated separately. The compost produced by a composting toilet has special requirements but is usually buried on site.

**Completion certificate** – formal notification from council indicating that a sewage management facility has been installed substantially in accordance with a relevant development approval, and is able to be commissioned.

**Council** – for the purposes of this strategy refers to the Dungog Shire Council.

**DCP** – Development Control Plan within the meaning of the Environmental Planning and Assessment Act.

**Desludging** – Withdrawing of sludge, biosolids, scum and liquid from a septic tank.

**Ecological Sustainable Development** – Development that improves the quality of life, both now and for the future, in a way that maintains the ecological processes on which life depends.

**Effluent** – wastewater discharging from a sewage management facility.

**Effluent application area** – an area of land specifically designated for the application of effluent either by subsurface absorption or by surface irrigation.

**Evapotranspiration** – process by which soil moisture is subject to processes of evaporation from the sun and wind and is transpired to the atmosphere via trees and plants.

**Greywater (or sullage)** – domestic effluent, excluding toilet waste.

**Ground Water** – All naturally occurring underground waters.

**Guidelines** – Environment and Health Protection Guidelines – *On-site Sewage Management for Single Households*.

**LGA** – Local Government Area.

**On-site Sewage Management System** – Any facility that stores, treats and/or disposes of sewage and wastewater on-site.

**Operational Constraints** – Those site or systems characteristics which place limits on the quality and quantity of wastewater that can be effectively treated by a sewage management facility within a given period of time.

**Pump-out System** – A septic system where all accumulated wastewater is removed from site by a purpose built road tanker.

**Reticulated Sewer** – Centralised sewerage system, consisting of a wastewater transport network, pumping stations, and treatment facilities designed to services multiple users concurrently. Hunter Water is the local authority for all reticulated sewer and Sewage Treatment Plants in the Dungog LGA

**Regulation** – Local Government (Approvals) Amendment (Sewage Management) Regulation 1998.

**Run-off** – The part of precipitation of irrigated effluent that becomes surface flow because it is not immediately absorbed into or detained by the soil.

**Septic tank** – conventional septic tank systems treat both greywater and blackwater, but they provide only limited treatment through the settling of solids and the flotation of fats and greases. Bacteria in the tank break down the solids over a period of time. Wastewater that has been treated in a septic tank can only be applied to land through a covered soil absorption system as the effluent is still too contaminated for above ground irrigation.

**Sewage** – human wastewater and matter which usually passes through the reticulated sewer or an on-site sewage management system.

**Sewage Management** – Any activity carried out for the purpose of holding, processing, reusing, or otherwise disposing of sewage or by-products of sewage.

**Total Catchment Management** – Total Catchment Management is the co-ordinated and sustainable use and management of land, water, vegetation and other natural resources on a catchment basis so as to balance resource utilisation and conservation.

**Useable land** - total allotment area excluding dams, intermittent and permanent watercourses and open stormwater drains and pits in addition to the relevant buffer distances prescribed in the Dungog Shire Council Development Assessment Framework for those objects.

**Wastewater** – Blackwater and/or Greywater.

## APPENDIX 1

## DEFINITION OF “MAJOR AND MINOR” BREACHES

*Treatment System “Major” Breach* – the failure, malfunction, collapse, omission, deterioration or breakdown of any treatment system component, tank, internal vessel or chamber, segregating baffle, control panel, power supply, chemical, aerating device or mechanical pumping device that is:

- Not currently under repair, or
- Has not been reported to an appropriate service provider in a timely manner,

And that:

- **Has** the potential to prevent the normal operation of the system;
- **Has** the potential to significantly reduce the quality of effluent from expected levels;
- **Has** the potential to impact on the natural environment, human health or public amenity;
- **Has** the potential to cause a significant public safety risk.

Table 1: Examples of Treatment System Major Breaches

Treatment System Type	Major Breach Description (To be considered in conjunction with definition)
Aerated Wastewater Treatment System	Inoperable aeration blower causing significant effluent quality problems
	Inoperable irrigation pump with effluent overflowing
	Fused/damaged control panel
	Internal baffle that has separated from the side wall allowing mixing of treated and untreated water
	System not being serviced and effluent quality significantly deteriorated
	No disinfection system (ie. Chlorine, ultra-violet, etc) in operation
	Tank lid that is significantly damaged. Potential safety risk, odour problem
Septic Tank	Excessive sludge levels (<200mm below outlet invert)
	Excessive water levels (above top of inlet/outlet junctions) or overflowing
	Structurally unsound tank - damaged below water level and is leaking effluent to ground surface/groundwater
	Tank lid that is significantly damaged. Potential safety risk, odour problem
Septic Pumpwell	Inoperable irrigation pump with effluent overflowing
	Tank lid that is significantly damaged. Potential safety risk, odour problem
Effluent Pump-out Tank	Effluent levels excessive with overflows visibly occurring
	Tank lid that is significantly damaged. Potential safety risk, odour problem
Wet Composting System	Structurally unsound tank - damaged below water level and is leaking effluent to ground surface/groundwater
	Tank lid that is significantly damaged. Potential safety risk, odour problem

*Treatment System "Minor" Breach* – all other areas, components or adjustments of the treatment system not captured under major breach definition and that:

- **Does not** have the potential to prevent the normal operation of the system;
- **Does not** have the potential to impact on the natural environment, human health or public amenity;
- **Does not** have the potential to significantly reduce the quality of effluent from expected levels.
- **Does not** have the potential to cause a significant safety risk.

**Table 2: Examples of Treatment System Minor Breaches**

Treatment System Type	Minor Breach Description (To be considered in conjunction with definition)
Aerated Wastewater Treatment System	Skimmer not operable
	Irrigation filter not in place
	Missing primary chamber inspection cap
	Minor odour
	Floating media blocks
	Floating scum in clarification chamber
Septic Tank	Moderate sludge levels (>200mm below outlet invert)
	Minor elevated water levels (above invert of outlet pipe but not above top of junctions)
	Tank that is cracked above water level and cracks are hairline only
	Tank lid that has minor cracking (hairline cracks)
	Missing inlet/outlet junctions
	Tank lid at ground level
	Missing inspection caps
Septic Pumpwell	Missing inspection caps
	Tank lid at ground level
Effluent Pump-out Tank	Missing inspection caps
	Missing standpipe cap

*Land Application (Disposal) Area "Major" Breach* – the observed failure of the land application area to adequately dispose of or contain effluent during normal annual climatic conditions that potentially may result in risk to the environment, public health or public safety. The failure of the land application area to operate within expected design limits. Land application area includes but is not limited to absorption trenches, evapo-transpiration beds, Wisconsin mounds, surface irrigation areas and sub-surface irrigation areas.

**Table 3: Examples of Disposal Area Major Breaches**

Land Application Area Type	Major Breach Description (To be considered in conjunction with definition)
Surface/subsurface Irrigation	Inadequate maintenance of irrigation hardware that results in the surface ponding of effluent
	End-of-pipe disposal
	Inadequate size of disposal area that results in significant saturation of soils
	Location of disposal area within prescribed buffer zones and environmentally sensitive areas
Absorption/Evapo-transpiration	Location of disposal area within observed recreational areas
	Observed ponding of effluent on the disposal area surface. Effluent must be confirmed via colour, clarity or odour.

*Land Application (Disposal) Area "Minor" Breach* – all other areas not captured under major breach definition and that are unlikely to result in environmental harm, risk to public health or risk to public safety.

**Table 4: Examples of Disposal Area Minor Breaches**

Land Application Area Type	Minor Breach Description (To be considered in conjunction with definition)
Surface/subsurface Irrigation	Missing warning signs
	Some spray heads inoperable
	Irrigation line not buried
Absorption/Evapo-transpiration	Overgrown vegetation
	Infrequent livestock access
	Damp/soft underfoot but no visible signs of effluent