



GLEN INNES SEVERN COUNCIL On-Site Sewage Management Strategy

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Related Documents:			



**Glen Innes Severn Council
On-Site Sewage Management
Strategy**

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Amendment No. 1	Council resolution dated 24 June 2010	Exemption of fee AWTS
Amendment No. 2	10 March 2016	Policy reviewed

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EXECUTIVE SUMMARY

Legislative changes in 1998 required the owners and occupiers of land to obtain the approval of Council to operate an On-Site Sewage Management (OSSM) system (septic tank). *The Local Government Act 1993* and regulations require that approval be gained from Council to operate an On-Site Sewage Management system.

This Strategy sets out Council's response to current legislation and the objectives of the Strategy. The broad objective is to ensure that there is a system in place to provide oversight and control of On-Site Sewage Management systems within Council's Local Government Area (LGA).

The goals of the strategy are:

- Reduction of public health risks;
- Protection of sensitive land and land uses from degradation from poorly designed and managed on-site sewage systems;
- Protection of surface and ground waters from poorly located, designed and managed on-site sewage systems;
- Encouraging the sustainable re-use of resources and the minimisation of water consumption with respect to on-site sewage management;
- Ensuring that an acceptable level of community and residential amenity is maintained and not impacted upon by poorly located, designed and operated on-site sewage management facilities;
- Education of system owners and users about their systems and the need to maintain and care for such systems;
- Implementation of a least cost method of supervision of on-site sewage management systems;
- Provision and creation of links between Council's strategic planning process and this strategy.

The initial legislative reforms were implemented in response to surveys which indicated on-site sewage management systems were failing to meet environmental and health protection standards. This strategy aims to address these concerns.

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1. INTRODUCTION

1.1 BACKGROUND

On-Site Sewage Management systems (OSSM) including septic tanks are used by approximately 250,000 households throughout NSW. There have been increasing concerns that these systems are failing to adequately treat and dispose of wastewater leading to pollution of waters, unhealthy conditions, and environmental concerns.

A public inquiry into the management of sewage and sewage by-products in the NSW Coastal zone indicated failure rates of OSSM systems as high as ninety percent, posing potentially serious public health risks through contamination of neighbouring land and water.

As a result of these concerns, on 6 March 1998 the State Government gazetted the *Local Government (Approval) Amendment (Sewage Management) Regulation 1998*. This regulation was superseded by the *Local Government (Approvals) Regulation 1999* and more recently by the *Local Government (General) Regulation 2005*. These Regulations prescribe the operation of sewage management as an activity for the purpose of Council approval under section 68 of the *Local Government Act 1993*. The issuing of approvals to operate allows Council to carry out ongoing monitoring of existing systems and to charge fees for the regulatory services provided.

Accompanying this regulation is the Environmental and Health Protection Guidelines “*On-site Sewage Management for Single Households*” and Australian/New Zealand Standard 1547:2000. These Guidelines and Standard have been issued to assist Councils to regulate the installation and use of OSSM systems. They also outline a prescribed set of performance standards that must be considered when approving the installation of new systems and when approving the operation and maintenance of existing systems.

Within the Glen Innes Severn LGA there are approximately 1,566 OSSM systems. These systems range from conventional septic systems to secondary treatment systems such as Aerated Wastewater Treatment Systems (AWTS). The number is increasing as more development occurs in the rural and semi-rural areas.

In 2010 Council adopted the Glen Innes Severn On-site Sewage Management Strategy and commenced inspections of all OSSM systems within the LGA.

This revised Strategy aims to address the results of the inspection program carried out by Council and Council’s involvement in educating the community to achieve sustainable OSSM practices within the LGA.

1.2 STATUS

This Strategy is an updated on the version of the Glen Innes Severn On-Site Sewage Strategy. The Strategy has been updated to reflect changes in legislation and operational procedures.

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1.3 SCOPE

The Regulation, Guideline and Standard provide a framework for implementation of ecologically and socially sustainable OSSM practices. It is intended that this be achieved, as far as possible, by a process of community and user education and by implementation of appropriate operating requirements in a manner which is sensitive to local circumstances.

An OSSM comprises a sewage management facility, and where applicable, a related effluent application area (land application area). The Regulation defines a “sewage management facility” as:

- a human waste storage facility; and
- a waste treatment device intended to process sewage, and includes a drain connected to such a facility or device.

The Regulation defines a “related effluent application area” as the area of land:

- where it is intended to dispose of the effluent and any by-products of sewage from the facility; or
- to which the effluent and by-products are intended to be applied.

For the purpose of this Strategy an OSSM system includes but is not limited to the following:

- septic tank and absorption trench;
- septic tank and evapo-transpiration area;
- aerated wastewater treatment system;
- wet composting toilet with sand filter and/or wetland reed bed with sub-surface application system;
- waterless composting toilet and greywater treatment system;
- greywater treatment systems;
- septic tank with sand filter and/or constructed wetland/reed bed with sub-surface application system;
- septic tank and amended soil mound system;
- septic tank and pump-out well;
- cesspit; and
- any other system that stores, treats and/or disposes of sewage and/or wastewater on-site.

Under the Regulation, to “operate a system of sewage management” means to hold or process, or re-use or otherwise dispose of, sewage or by-products of sewage (whether or not the sewage is generated on the premises on which

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the system of sewage management is operated) and includes the use of artificial wetlands, transpiration mounds, trenches, vegetation and the like in related effluent application areas, and holding or processing sewage that is to be subsequently discharged into a public sewer.

1.4 PURPOSE

This Strategy outlines the framework:

- to manage and regulate the impact of OSSM systems in the Glen Innes Severn LGA and to ensure community accountability;
- to assist Council in the prioritising of resources for efficient regulation and monitoring of OSSM in the LGA; and
- to coordinate data collection, system approval, monitoring and environmental assessment.

1.5 OBJECTIVES

The Glen Innes Severn On-site Sewage Management Strategy should provide a framework to allow Council to regulate and manage the installation, operation and maintenance of all OSSM systems with consideration of:

- the physical characteristics of the site;
- protection of surface waters;
- protection of ground water;
- protection of land and natural vegetation;
- protection of public health and the prevention of any public health risk;
- maintaining and enhancing community amenity;
- encouraging conservation and reuse of water; and
- the principles of ecologically sustainable development.

1.6 GOALS

Council's goal is to work together with the community, developers and service agents to ensure well managed and efficiently performing, on-site sewage systems, through correct installation, regular monitoring and education.

To achieve Council's goal the following actions will be taken:

- Householders will be encouraged and assisted to develop and implement a site specific sewage management maintenance program;
- Council will build and maintain a database of all existing on-site sewage systems;

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- Council will review its development standards and approval criteria for subdivision, development and buildings to ensure that appropriate provision is made for sustainable on-site sewage management when residential development occurs in non-sewered areas;
- Council will ensure that all land application areas comply with environmental and health protection standards and Council's operating requirements;
- Regular monitoring by Council of high risk systems, and continual monitoring of other risk categories; and
- Council will ensure that all OSSM systems assessed as being high or medium risk are inspected by qualified and accredited people at the intervals determined through the risk assessment process.

2. LEGISLATION AND GUIDELINES

This section contains an outline of the relevant Acts, Regulation and accompanying Guidelines and standards, all of which must be considered by Council in the management of new and existing OSSM systems.

2.1 LOCAL GOVERNMENT ACT 1993 / LOCAL GOVERNMENT (GENERAL) REGULATION 2005

The *Local Government Act 1993* and the *Local Government (General) Regulation 2005* set out specific requirements for on-site sewage management approvals including matters for Council consideration, performance standards and circumstance where prior Council approval is not required. Division 4 of the Regulation incorporates the requirements for approval to operate an OSSM system.

The sewage management regulations operate in terms of the Local Government approval system established under Chapter 7 of the *Local Government Act 1993*. The primary effects of the regulation and related reforms are:

- The operation of a system of sewage management (as defined) is a prescribed activity for the purpose of Council approval under section 68 of the Act;
- The Council must develop a strategy for on-site sewage management in its area;
- The Council must consider applications for approval to operate a system of sewage management from relevant landowners, including some Government Authorities, determine the least cost approach to performance assurance and implement appropriate supervision;
- The Council may charge application, renewal and inspection fees to recover the cost of supervising facilities which are subject to an operating approval;

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- The Council must not approve the installation of a commercially distributed sewage management facility of a type specified in *Local Government (General) Regulation 2005*, clause 40, unless plans are provided and a certificate of accreditation issued by NSW Health is in force;
- The Council must apply prescribed performance standards when determining applications for approval to install or operate sewage management facilities;
- The Council must consider directions or guidelines issued by the Director General of the Office of Local Government in relation to the prescribed performance standards when determining applications for approval.

2.2 PROTECTION OF THE ENVIRONMENT OPERATIONS (POEO) ACT 1997

A major objective of the *POEO Act 1997* is to reduce risks to human health and prevent the degradation of the environment. Local Councils and other local authorities are the appropriate regulatory authority for non-scheduled activities in its area.

2.3 ENVIRONMENTAL AND HEALTH PROTECTION GUIDELINES

Environment and Health Protection Guidelines: On-site Sewage Management for Single Households ("the Guidelines") has been issued to assist Councils regulate the installation and use of OSSM systems. The Guidelines address the regulatory framework, the development of local sewage management strategies, administration and operational issues, site assessment principles and principles for selection and operation of OSSM systems.

The Guidelines and Standard were prescribed by the Director General of Local Government and in accordance with Clause 29 and 43 of the *Local Government (General) Regulation 2005*. They are a matter for consideration by Council in relation to applications:

- a) for approval to install, construct or alter a relevant waste treatment device or human waste storage facility; and
- b) for approval to operate a system of sewage management.

2.4 AUSTRALIAN STANDARDS

The Standard AS/NZS 1547:2000 is used to provide technical guidance in the design, operation and maintenance of systems. The Standard is designed to include performance statements necessary to define outcomes and to accommodate new technologies, and to:

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- a) provide the basic performance provisions for septic tanks (AS/NZS 1546.1-1998) and introduce performance requirements to cover all types of wastewater-treatment units and land-application systems;
- b) set out the administrative and managerial responsibilities, and the education and training needed to ensure that on-site domestic-wastewater systems could be effective long-term options;
- c) give guidance on operation and maintenance of on-site domestic-wastewater systems;
- d) give guidance for on-site evaluation;
- e) give guidance on soil assessment;
- f) provide options for on-site domestic wastewater-treatment and land-application systems;
- g) give guidance on design, construction and installation.

AS/NZS 1546.1:1998 – On-site Domestic Wastewater Treatment Units –
Part 1: Septic Tanks

This Standard identifies performance requirements and performance criteria for septic tanks, specifies technical means of compliance and provides test specifications that enable septic tanks to be manufactured to comply with the Standard.

AS/NZS 1546.2:1998 – On-site Domestic Wastewater Treatment Units –
Part 2: Waterless composting toilets

This Standard covers the requirements of waterless composting toilets which are intended primarily as stand-alone units for residential use but may be suitable for non-residential applications.

AS/NZS 1546.3 1998 – On-site Domestic Wastewater Treatment Units –
Part 3: Aerated wastewater treatment systems

This Standard sets out performance requirements, design requirements, means of compliance, installation requirements, requirements for operations and maintenance and specification for testing aerated wastewater treatment systems and associated fittings.

2.5 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

A number of planning instruments, under the *Environmental Planning and Assessment Act 1979*, are relevant to the operation and installation of on-site sewage management systems in the Glen Innes Severn Council LGA.

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These include:

- the Glen Innes Local Environmental Plan 2012; and
- the Glen Innes Severn Development Control Plan 2014.

2.6 DEPARTMENT OF HEALTH - SYSTEM ACCREDITATION

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. The facilities that must be subject to a certificate of accreditation are specified in clause 40 of the *Local Government (General) Regulation 2005*.

The accreditation system provides a centralised assessment and testing procedure. A certificate of accreditation might include specific requirements for the installation, operation, and maintenance of the tested system. Such conditions become part of the Council's approval. NSW Health accreditation is not required for prototype facilities installed for testing, for systems designed and constructed by owner/occupiers for their own premises, and for one-off designs prepared for a particular premise. Council will assess such applications on a case by case basis.

The NSW Health Department provide a register of accredited systems and registered systems may be viewed at:

<http://www.health.nsw.gov.au/environment/domesticwastewater/Pages/default.aspx>

The following accreditation guidelines have been prepared for most sewage management facilities by NSW Health Department.

- Septic Tank and Collection Well Accreditation Guidelines December 2001 (includes septic tanks, collection wells, septic closets, greywater tanks, CED pre-treatment tanks and sewage ejection pump stations);
- Sewage Management Facility, Sewage Treatment Accreditation Guidelines (incorporating AWTs and Sand Filters), May 2005;
- Interpretation Document to AWTs Guideline, December 1998;
- Waterless Composting Toilet Accreditation Guideline, May 2005;
- Draft Chemical Closet Accreditation Guideline May 1999;
- Greywater Reuse in Single Domestic Premises – April 2000;
- Domestic Greywater Treatment Systems Accreditation Guidelines – February 2005.

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3. RESPONSIBILITIES

3.1 COUNCIL RESPONSIBILITIES

Glen Innes Severn Council responsibilities include:

- ensuring approval is sought for the implementation and operation of OSSM systems within Glen Innes Severn LGA;
- assessing approvals and proposed systems;
- identifying all OSSM systems within the LGA;
- supervising and monitoring the operating performance of each individual system by on-site inspections;
- development and maintenance of a register of OSSM systems within the LGA;
- identifying the potential risk posed by systems and classifying systems, as well as identifying sensitive areas;
- enforcing compliance with operational standards, to protect the health of the public, the environment, and community amenity, including issuing orders and penalties for non-compliance;
- determining renewal of approvals to operate an OSSM system;
- responding to complaints and pollution incidents;
- considering long term goals and solutions for enhanced protection of public health, the environment, and community amenity;
- monitoring and reporting on the overall impact of OSSM systems within the LGA;
- guiding system operators toward obtaining further information and assistance; and
- striving for ecologically sustainable development through appropriate strategies.

3.2 OWNER RESPONSIBILITIES

The individual owner is responsible for:

- seeking approval from Council for the operation of an OSSM system;
- the maintenance and operation of their OSSM system;
- determining the regular maintenance that is required for their system and gaining knowledge regarding the processes required to extend the life of their system, including the land used for the disposal area. This also includes implementing conservative use of water and avoiding strong chemicals so as to maintain efficient system performance, and as a result extend the operational life of the system;

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- ensuring that their system is operating effectively and complies with approval conditions and statutory requirements, including not allowing wastewater to be discharged onto non-designated areas;
- ensuring that no wastewater is discharged to any watercourse, neither permanent nor intermittent;
- ensuring that manufacturer's instructions for use and maintenance of the system are followed to ensure effective and efficient system operation;
- in the case of AWTS, owners must ensure that maintenance and service contracts are current and operational, as well as ensuring that the system is visited by a service provider every three (3) months; and
- ensuring that occupants are provided with the necessary information and support to successfully operate and maintain their OSSM system, in the case of absentee owners.

4. PERFORMANCE OBJECTIVES

The performance objectives are outlined in the Guidelines and have been formulated to ensure that OSSM for single households is appropriate and will not affect public health or the environment. When considering using any OSSM system, particular attention should be paid to the cumulative effects of multiple systems operating within a catchment, and within the wider environment.

OSSM systems should meet the following environmental and health performance objectives over the long term.

Prevention of public health risk

- effluent from primary treatment (ie septic tank) shall only be disposed of through soil absorption, evapo-transpiration, discharge to reticulated sewage system or removal from the site by a registered contractor;
- contact with effluent from aerated systems shall be minimised or eliminated;
- there shall be no contact with effluent from any other type of system;
- treated effluent shall not be used on edible crops or recreational lawn areas; and
- surface irrigation shall only occur with disinfected effluent from an aerated system.

Protection of lands

On-site disposal of effluent shall minimise:

- soil structure degradation;
- salination;

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- water logging;
- chemical contamination; and
- soil erosion.

Protection of surface waters and groundwater

- an appropriate OSSM shall be chosen for the site to ensure effluent does not enter surface waters or contaminate ground water;
- effluent disposal areas shall be located no less than 100 metres from a water course and 40 metres from a dam or other water body if within its catchment;
- the disposal area shall be monitored and managed so that effluent does not escape to the surface or position where the effluent may be washed into a water course in a minor rain event; and
- adequate consideration shall be given to managing effluent during wet weather.

Protection of community amenity

- an OSSM shall not cause a nuisance to others and particular attention shall be given to any noise and odours generated;
- disease vectors and other pests such as mosquitoes shall be controlled; and
- the siting and operation of an OSSM shall not impact on the aesthetics of an area.

Conservation and reuse of resources

- the resources in wastewater such as the water and nutrients should be put to the best use possible within the bounds posed by other performance objectives; and
- water conservation shall be included in any OSSM Management Plan.

5. OPERATIONAL STRATEGY

This section of the Strategy sets out the processes for the issuing of Approvals to Operate and the classification and inspection of OSSM systems. The operational strategy provides an effective and self-funding approvals and monitoring plan for OSSM in the Glen Innes Severn 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. An essential component of the program is the consultation with owners to establish and improve Council's records of the individual systems, to encourage upgrading where appropriate and to provide

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information relating to the operation and maintenance of the various OSSM systems.

5.1 APPROVAL TO OPERATE

The *Local Government (General) Regulation 2005* requires that an owner of an OSSM system seeks Approval to Operate the sewage management system in addition to any approval required for the installation of the system. As such, all system owners are required to be included on Council's register of approvals.

The approval process establishes an accountability relationship between the property owner and the Council. This will enable Council to ensure that householders and property owners are aware of the maintenance and operating requirements of their system.

5.1.2 Existing Systems

All owner/operators of existing OSSM systems were required under the regulations to lodge an Application for an Approval to Operate. Following the implementation of the Glen Innes Severn OSSM Strategy and inspection program, a register of all systems in Council's LGA has been developed.

To continue the approvals process it is proposed:

- approvals will be renewed based on the risk category of each individual system;
- low and medium risk systems will be issued with a five (5) year approval commencing 1 July 2016;
- high risk systems will be issued with a one (1) year approval commencing 1 July 2016. From 1 July 2017, high risk systems will be required to make an application annually and pay the prescribed fee. In addition a prescribed inspection fee will also apply to high risk systems upon completion of any outstanding works;
- an Application to Operate Approval fee will be waived for the following systems:
 - Aerated Wastewater Treatment Systems inspected by an accredited person;
 - On-Site Sewage systems connected to the Deepwater Common Effluent System; and
 - On-Site Sewage systems connected to the Glen Innes Sewerage reticulation system.

5.1.3 Renewal of Approval with Transfer of Title

The regulation provides that a person who purchases land on which any sewage management facilities are installed may continue to operate such a system, without the approval so required, for a period of three (3) months from the date on which the property is transferred. It is further provided that, if a

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person who purchases (or otherwise acquires) land on which an OSSM system is installed, and applies for an approval within two (2) months of the transfer of title, they may continue to operate the system until such time as the application is finally determined by Council.

New owners will be required to make application for Approval to Operate an On-Site Sewage Management System. There are no fees attached to this application. New owners however will be required to pay the annual fees as issued on the properties rate notice each July, as is the case with all holders of ongoing Approvals.

5.1.4 New Systems

Construction or alteration of a waste treatment device or a human waste storage facility currently requires approval in accordance with the *Local Government Act 1993* (Item 5 of Part C of the Table to Section 68). As from 6 April 1998 all new systems also require an Approval to Operate in accordance with the amendments to this Act. Before granting the initial Approval to operate for new On-Site Sewage Management systems:

- Applicants must submit an Application to Install and Operate an On-site Sewage Management System accompanied by:
 - a) Site plan indicating, buffer distances from the dwelling, boundaries, swimming pool, paths, groundwater bores and waterways, primary and reserve disposal area and stormwater diversion drains;
 - b) Specifications of the system;
 - c) Operation and maintenance requirements including any maintenance agreement;
 - d) Site assessment;
 - e) Details of number of persons to reside on the premises and other factors relevant to the capacity of the system;
 - f) Any additional information required by Council to enable assessment in accordance with the Environmental and Health Protection Guidelines and AS/NZS 1547:2000.
- Each application will be assessed by the determining Council Officer in accordance with AS/NZS 1547:2000. Council must consider the Environmental and Health Protection Guidelines and performance objectives contained in these Guidelines;
- The processing of Applications for Approval to Install an On-site Sewage Management System will be carried out by Council's Building Development Officers;
- The system must be installed in accordance with the Notice of Determination issued and required inspections must be undertaken by Council's Building Development Officers;

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- Council's OSSM Officers will issue the Approval to Operate after the final inspection provided that the specifications and any conditions on the installation have been met;
- The Annual Approval to Operate fee will activate the next financial year after the commencement of building works on the site. This allows for an interim approval of any builders' toilet facility for the period until the building has been completed. This period is usually less than 12 months, however occasionally can be a number of years.

5.1.5 Greywater Treatment/Diversion Systems

Greywater Treatment Systems (GTS) and Greywater Diversion Systems (GDS) both require Approval to Operate from Council whether installed in sewered or unsewered areas. GTS are a system or device that collects, treats and disinfects grey water for reuse for toilet and urinal flushing or laundry use, and / or for use in surface and sub-surface irrigation in dedicated non-trafficable areas.

GDS are a device that collects and directs untreated greywater to a sub-surface irrigation area or to the sewer. This system does not allow storage or treatment, apart from a coarse screen filter, which may remove lint, hair and coarse particles. The installation of GTS requires Council approval under Section 68, of the *Local Government Act 1993*, as they store and treat wastewater. GDS also requires installation approval where alterations are required to plumbing or drainage. Applications to install must be accompanied by the same information as required for the installation of an OSSM system. Council must be satisfied that the site is suitable for the disposal of greywater. Approval to Operate will only be issued where the installation and operation complies with the objectives of this strategy, therefore Council must be consulted prior to installation and approval obtained.

5.2 MONITORING PROGRAM

Council is required to implement a monitoring program of existing systems and ensure these systems meet the environmental and health performance objectives set out in this Strategy and in the Environmental and Health Protection Guidelines over the long term. This program involves monitoring service documentation and on-site inspections.

5.2.1 Risk Categories and Frequency

Inspection priorities are assigned to areas and individual systems using:

- known areas of concern;
- information contained in the applications for Approval to Operate;
- GIS overlays of waterways, sensitive areas, soil types, flood characteristics and groundwater information related to cadastral details;
- allotment size information contained in Council's property system; and

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- information gained from previous audits / inspections in the Glen Innes Severn Council LGA.

5.2.2 Indicative Risk Criteria

Set out below are ranges of indicative criteria, which will be used by Council staff when making risk assessment of installations. With particular installations there may be other issues, which may also be taken into account as part of the risk assessment process.

Low Risk Indicative Criteria

A low risk system must have been inspected and deemed to be operating in accordance with the following criteria:

- ✓ the performance objectives of this strategy;
- ✓ any requirements of the manufacturer of any of the system's components;
- ✓ any conditions of accreditation imposed by the Director General of the Department of Health in respect of plans and designs for the sewage management facility;
- ✓ any conditions imposed by Council on any approval to install a system of sewage management.

In addition a low system must meet the following:

- located within a rural zone and property is >2ha; or
- system is located >100m from a watercourse/lake/water body; or
- a system on property >100m from a system on an adjoining property; or
- >100m from a well or bore; or
- located on a slope less than 5%; or
- common effluent systems or pump to sewer systems that are maintained by Council.

A low risk system will be issued with an Approval to Operate for a maximum of five (5) years.

NB. It should be noted that failure to comply with the performance criteria or any conditions of either the Department of Health or Council means that the classification of a system may be changed to medium or high risk.

Medium Risk Indicative Criteria

A medium risk system must have been inspected and deemed to be operating in accordance with the following criteria:

- ✓ the performance objectives of this strategy;
- ✓ any requirements of the manufacturer of any of the system's components;

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- ✓ any conditions of accreditation imposed by the Director General of the Department of Health in respect of plans and designs for the sewage management facility;
- ✓ any conditions imposed by Council on any approval to install a system of sewage management.

In addition medium risk systems must meet the following:

- Within Village, Urban zoned and Rural-residential (<2Ha) areas;
- An aerated wastewater treatment system;
- A system used for high density occupations >10 persons, including schools, caravan parks etc; or
- In an area with high groundwater table (i.e. within 2.0m of the surface; or
- Within 100m from a watercourse/lake/water body, 40m from a dam or 50m from a well or bore; or
- Within 20m of a property boundary; or
- Within flood-prone areas (ie disposal within the defined 1:20 flood level, treatment system within the defined 1:100 flood level); or
- On land with a slope of >15%; or
- On any premises with a reticulated water supply; or
- Located in sandy soils or where a rock layer is within 0.5 metres of the surface; or
- Serving an industrial property; or
- A system defined as a pit, humus closet or wet composting toilet, or
- On properties utilising trench disposal where heavy clay soils are present.

A medium risk system will be issued with an Approval to Operate for a maximum of five (5) years.

NB. It should be noted that failure to comply with the performance criteria or any conditions of either the Department of Health or Council means that the classification of a system may be changed to high risk

High Risk Indicative Criteria

High risk indicative criteria for installations that are not low or medium risk and include the installation are:

The system has been inspected by Council staff in the last five (5) years and has been deemed not to be operating in accordance with:

- ✓ the performance objectives of this strategy;

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- ✓ any requirements of the manufacturer of any of the system's components;
- ✓ any conditions of accreditation imposed by the Director General of the Department of Health in respect of plans and designs for the sewage management facility;
- ✓ any conditions imposed by Council on any approval to install a system of sewage management.

A high risk system will be issued with an Approval to Operate for a maximum of one (1) year.

(In this respect it should be noted that Council is the authority for making the necessary determinations regarding the above issues).

Exempt Indicative Criteria

Approval to Operate is not required for any system operated by National Parks and Wildlife Services (NPWS) as stated in Department of Local Government Circular 99/59. Where the occupier is a lessee, approval to operate is required. It is NPWS policy to register all systems so that they comply with the requirements of the legislation and they do not object to Council undertaking inspections. Therefore, systems that are owned and operated by NPWS are included on Council's register but cannot be charged the annual approval fee.

Approval to Install is not required from Council where the installation is on land owned by the NPWS. This approval must be obtained from the Department of Environment and Conservation. Under the *Protection of the Environment Operations Act 1997*, Council is the appropriate regulatory authority for systems on Crown Land, operated by a lessee. An activity carried on by a State or Public authority, such as public facilities in a national park are regulated by the Environment Protection Authority.

5.2.3 Review of, and Changes to, Categories or Risk

When an installation has been assessed and allocated to a category of risk by a member of Council's staff, any owner who believes that such allocation is not appropriate may apply to Council to have the risk assessment reviewed. Such a review may or may not involve the carrying out of a site inspection of the installation and may involve the payment of a fee to Council.

Council may decrease the risk category or inspection frequency where continued satisfactory operation of the system is shown. Similarly the risk category or inspection frequency may be increased where it is revealed that more frequent monitoring is required.

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5.3 INSPECTION PROCESS

Council will inspect all systems in the LGA upon expiry of the five (5) year approval period. Systems located in the high risk category will be inspected upon rectification of outstanding works and approval required to operate annually until such time as the system is categorised as low or medium risk.

If changes are made to conditions as a result of the inspection, owners are issued with a new Approval to Operate.

5.3.1 Reduced Inspection Programs

The risk category of the OSSM system determines the inspection frequency. However, a reduced inspection frequency can be introduced for systems that establish a lower risk than determined by the risk category. To reduce the inspection program an owner or operator needs to establish a high operational performance of the OSSM system. Consequently, inspections for individual systems are reduced to a lower risk category when a high performance and reduced risk is established.

Alternatively, Council officers may increase the inspection program of any installation if the risks are not appropriately addressed. Owners and/or operators will be notified of any alterations to the inspection program.

5.3.2 Notification of Inspection

Property owners will be given notification of Council's intention to inspect their OSSM systems. Notification will specify a broad time period during which the inspections are to be carried out and request that access be provided and where necessary arranged with Council. Property owners wishing to be present at the time of the inspection will be given the opportunity to arrange a mutually convenient time for the inspection to take place.

5.3.3 Monitoring of Pump-out Systems

There are systems in the Glen Innes Severn LGA where effluent may be removed from on-site holding tanks on a regular basis by road tanker. Council currently does not receive any documentation of the pump out services carried out by private Contractors. It is proposed to develop a partnership with contractors to supply documentation to Council allowing the information to be recorded on Council's register. Volumes and frequency of services for individual systems should be monitored regularly to ensure that a satisfactory service is being maintained.

Pump-out systems are inspected as a medium risk installation unless other parameters of risk classification make individual systems high risk. This inspection takes particular note of the service history, tank soundness, potential for stormwater entry into the system, greywater disposal, sludge levels in the primary tank and water economy.

The Council does not support an increase in pump-out OSSM systems due to the high probability of the systems not being operated correctly and ongoing monitoring requirements. Therefore pump-out systems are generally only

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approved on existing small lots where options for on-site disposal are severely limited.

5.3.4 Monitoring of Common Effluent Systems and Pump to Sewer Systems

Deepwater has approximately 180 properties connected to a common effluent gravity system. These systems are required to be included on the OSSM register although are exempt from annual approval fees as sewer rates are payable. This will also be applicable for properties that pump to sewer installations in the Glen Innes Severn LGA.

Where effluent is temporarily stored in septic tanks or pump wells and regularly pumped to Glen Innes Severn Council sewer mains, or gravity fed in the instance of Deepwater, these systems are generally regarded as low risk systems unless environmental factors or high volumes increase this risk. The inspection of these systems should pay particular attention to the potential for stormwater inundation, electrical switchgear, timer settings, pump size and sludge levels in the primary tank.

5.3.5 Monitoring of Aerated Wastewater Treatment Systems

These systems generally dispose of effluent through subsurface drip or above ground irrigation after on-site treatment by aeration and disinfection. As a condition of certification by NSW Health Department and Council's installation approval these systems are serviced quarterly by recognised service providers.

Review of service reports and Council inspections in a number of other Council areas have shown that AWTS despite receiving this quarterly service are often not performing to their installation approval specifications (particularly in relation to disposal field irrigation). Inspections of AWTS systems will include an overview of the operation of the system, including sludge levels, aeration and disinfectant. Particular attention will be directed to the operation of the disposal area.

The inspection is not a service and no changes to the system operation will be made. Once individual systems reach the required standard Council will undertake regular inspections at a decreased frequency and monitor the existing service documentation.

5.3.6 Monitoring of Transpiration and Absorption Areas

This is the most common method of disposal in the Glen Innes Severn LGA. These systems involve the subsurface disposal of primary treated effluent by:

- a) absorption trenches through percolation into the soil; or
- b) transpiration beds, by evaporation and transpiration of moisture into the atmosphere and into the soil by partial percolation.

Effluent from these systems undergoes only primary treatment and the inspection must ensure that this effluent is not exposed on the surface and that there is little potential for contamination of ground and surface water with this effluent. The diversion of stormwater, desludging of primary tanks, water

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economy and disposal field maintenance are areas that also must be assessed during any site inspections.

5.3.7 Monitoring of Other Types of Systems

Other systems may include composting systems, chemical closets and other secondary treatment systems or disposal areas such as wet composting systems, reed beds, sand filters, mounds and biological filtration systems. These systems are inspected and monitored to ensure they conform to installation specifications with consideration of the performance standards as set out in the Guidelines and this Strategy.

5.3.8 Monitoring of Major Commercial Systems

These systems treat in excess of 2,000 litres of effluent per day and have been therefore classified as major commercial systems requiring comprehensive annual inspection to ensure compliance with approval and operating requirements. A Management Plan for these systems will be requested by Council to give owners, operators and Council an understanding of the operational and maintenance requirements. Other minor commercial systems will be included with the domestic systems inspection process.

5.4 UPGRADING OF FAILING SYSTEMS

Inspections are required to ensure that OSSM 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 Guidelines and this Strategy.

System failure is deemed to have occurred when a system fails to achieve prescribed performance standards and conditions of approval that may result in adverse impacts on public health or the environment.

Where a system failure is identified, Council may take one or more of the following actions:

- provide advice and educational material to the system owner and/or operator as to the best practice in operating and maintaining the OSSM system. This may include advice on the use of water saving devices, stormwater diversion, desludging etc (this will be Council's preferred course of action);
- Council may require action or works to be carried out through section 124 of the *Local Government Act 1993* where it may issue an Order to carry out specific work; and
- where pollution is likely to occur alternative action may be issued in accordance with the *Protection of the Environment Operations Act 1997* including Clean-up Notice or Prevention Notice.

There are a number of social considerations which may be relevant in the OSSM issue, including:

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- the financial implication for property owners who may be required to carry out substantial system upgrading works or complete system replacement;
- the introduction of “pump-out” arrangements as an alternative to on-site disposal also has substantial financial implications for property owners; and
- the significant ramifications that may arise to property owners if their allotment is considered to be of insufficient size to achieve sustainable on-site effluent disposal.

The above issues require consideration when decisions are made, particularly for existing sewage management facilities. In some circumstances, where there is a serious threat to the environment or public health, it may be necessary for Council to consider undertaking the work required, recovering the cost through a property debt.

5.5 REVIEW OF POLICY

This policy will be reviewed every five (5) years or as may be required from time to time.

5.6 COMMUNICATION AND IMPLEMENTATION

Owners of high risk OSSM systems will be advised in writing of the new strategy and how it will impact them from 1 July 2017.

Information will be updated and continue to be provided on Council's website www.gisc.nsw.gov.au, including a copy of this Strategy.

Information on the changes to the Policy will be provided in a Resident Newsletter in 2016.

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