Cessnock City Council



On-Site Sewage Management Strategy



2010-2012

CONTENTS

| EXECUTIVE SUMMARY | 1 |
|---|-----|
| INTRODUCTION | 2 |
| OBJECTIVES | 2 |
| 1. Promote Sustainability | 2 |
| 2. Effective Management of On-Site Sewage Management Systems | 2 |
| 3. Education & Stakeholder Involvement | 2 |
| OVERVIEW | 3 |
| STATEMENT OF COUNCIL'S COMMITMENT | 4 |
| LEGISLATION | 5 |
| LOCAL GOVERNMENT ACT 1993 | 5 |
| PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997 | 5 |
| 1. Clean-up Notices | 5 |
| 2. Prevention Notices | 6 |
| 3. Compliance Cost Notices | 6 |
| 4. Penalty Infringement Notices | 6 |
| AS/NZS 1547:2000 ON-SITE DOMESTIC-WASTEWATER MANAGEMENT | 6 |
| AS/NZS 1546:1998 ON-SITE DOMESTIC WASTEWATER TREATMENT UNITS | 6 |
| GUIDELINES AND STANDARDS | 7 |
| ENVIRONMENT & HEALTH PROTECTION GUIDELINES 1998 | 7 |
| AS/NZS 1547:2000 ONSITE DOMESTIC WASTEWATER MANAGEMENT | 7 |
| DEPARTMENT OF ENERGY. UTILITIES AND SUSTAINABILITY: NSW | |
| GUIDELINE FOR GREYWATER REUSE IN SEWERED SINGLE HOUSEHOL | LD |
| RESIDENTIAL PREMISES. 2007 | 7 |
| NSW HEALTH: GUIDELINES FOR ON-SITE SEWAGE MANAGEMENT | 8 |
| ENVIRONMENTAL AND PUBLIC HEALTH ISSUES | 8 |
| PROGRAMS | . 9 |
| APPROVAL PROGRAM | 9 |
| Approval to Install Onsite Sewage Management System | 9 |
| Approval to Operate a System of Sewage Management. | 9 |
| Approval for Greywater Reuse | 10 |
| Commercial Systems | 10 |
| Revoking an Approval | 11 |
| Revoking an Approval in Sewered Areas | 11 |
| Failure to Obtain Approval to Operate a System of Sewage Management | 11 |
| INSPECTION PROGRAM | 12 |
| Inspection costs | 12 |
| Notification of inspection | 12 |
| Assigning a risk-rating to the system | 13 |
| Frequency of inspections | 13 |
| STAFF REQUIREMENTS | 14 |
| EDUCATION PROGRAM. | 15 |
| STRATEGY REVIEW | 16 |
| CONCLUSION | 17 |
| REFERENCES | 18 |
| | 10 |
| | 10 |

EXECUTIVE SUMMARY

Cessnock Local Government Area (LGA) covers approximately 1950 square kilometres within the Hunter Region of New South Wales. Cessnock is approximately 120 kilometres north of Sydney and 30 kilometres from the coast. The area has a population of 46206 (2006 census) and contains sewered and unsewered areas. There are approximately 4,150 systems within the LGA consisting of common effluent pump systems, pump-outs, aerated wastewater treatment systems, absorption trenches and compositing systems.

The first On-Site Sewage Management (OSSM) Strategy was developed in 2000 and has been reviewed to ensure changes in legislation and technology are accounted for. The On-Site Sewage Management Strategy 2010-2012 builds on the successes of the past and aims to sustain the high levels of onsite sewage management system performance in Cessnock City Council.

The Strategy aims to provide an approach to OSSM through sustainability, effective management control and education. Since the introduction of the first Strategy residents living within unsewered areas are better informed about their responsibilities and system maintenance requirements.

As a result, on-site sewage management systems are operating at a much higher performance level than in the past. Council has a responsibility to monitor not only individual system performance and take action in regard to defective systems where required, but also to manage the cumulative impact of small amounts of sewage from the many systems in the area. Council is committed to a process of continued improvement in on-site sewage management, sustainable development and better community awareness of onsite sewage management system issues within the Cessnock LGA.

In doing this Council has allocated resources to support a number of programs which are ongoing including the Hunter Water's Priority Sewerage Program, the Approval Program, the OSSM Inspection Program and education programs. Through effective use of this Strategy, the public health and environmental impacts associated with the use of OSSM systems have been reduced.

INTRODUCTION

OBJECTIVES

This Strategy has been developed to provide an integrated approach to OSSM within a self regulating framework of community education, local support services and environmental and public health protection. The three key objectives of this Strategy are to:

1. Promote Sustainability

- Ensure sustainable management of wastewater generated on all unsewered properties within the LGA, including best practice and the approval of systems advocating treated wastewater reuse.
- Monitor and manage cumulative impacts from OSSM systems.
- Implement and facilitate best management practice in relation to the installation and operation of onsite sewage management systems.
- Pursue long term, viable sewage management solutions for identified high risk areas.

2. Effective Management of On-Site Sewage Management Systems

- Ensure that all sewage management systems have the required operating approval and are operating in accordance with approval conditions.
- Progressively eliminate illegal discharges of effluent from OSSM systems.
- Protect surface water, stormwater, land and vegetation, public health and community amenity from the impacts associated with OSSM systems.

3. Education & Stakeholder Involvement

- Ensure that all stakeholders are aware of their responsibilities and have access to enough appropriate information to ensure their responsibilities are met.
- Work in partnership with the community and other stakeholders to ensure sustainability of on site sewage management in Cessnock LGA.
- Ensure that the community is provided with an efficient, cost effective OSSM program which meets both the needs of the stakeholders and the responsibilities of Council.
- Educate and support professional service providers.

OVERVIEW

Through the implementation of actions within the Strategy OSSM systems on the whole are operating at a much higher performance level than recognised previously. Both the education materials and Approvals to Operate distributed to all system owners have ensured that residents living within unsewered areas of the community are more informed about their system maintenance responsibilities.

The On-Site Sewage Management Inspection Program has been operational since 2001. In this time, the number of systems within the Cessnock LGA has grown to over 4,150 and over 95% of these have now been inspected by Council.

The Strategy relates to all fixed sewage management facilities including public, industrial and commercial systems, which do not discharge directly to a public sewer or are not licensed by the NSW Department of Environment Climate Change and Water (DECCW).

The Strategy also includes the operation of domestic greywater treatment systems and greywater diversion devices in the region. On-Site sewage management involves the treatment of wastewater followed by the release of liquid (treated wastewater) and solid (sludge, septage and compost) products into the environment or removal by tanker pump out.

Inappropriate use or disposal of these products can have the following adverse impacts:

- The spread of disease by bacteria, viruses, parasites and other organisms in the wastewater.
- Contamination of groundwater and surface water.
- Pollution of waterways.
- Degradation of soil and vegetation.
- Decreased community amenity, caused by odours, noise and insects.

On-site sewage disposal has the potential to affect public health, the local economy, recreation, residential and business development and other aspects of everyday life.

As residents are more likely to be directly responsible for making decisions about their wastewater, it is important that they know about their system and its potential impact on public health and the environment.

In 2004 the New South Wales Government announced the Priority Sewerage Program and identified the communities of Kitchener, Ellalong and Millfield as three townships that required sewering. The chosen scheme will utilise a gravity feed reticulated sewerage technology to service the villages of Kitchener, Ellalong and Millfield.

Hunter Water commenced construction of the scheme in the village of Kitchener in April 2006 and has been liaising with Council regarding connections to the system. Connections to the reticulated sewerage system have been made progressively available from February 2007.

Hunter Water has also commenced the construction of the scheme in the villages of Millfield and Ellalong (April 2009). These systems were available for connection from September 2010.

STATEMENT OF COUNCIL'S COMMITMENT

This Strategy is an evolving document which allows for a process of continual improvement in OSSM practices within the Cessnock City Local Government Area. The ongoing evaluation of the monitoring, inspection, approval and education programs will highlight the strengths and deficiencies of this Strategy and where changes may need to be made. Council is committed to improve public health and environmental outcomes by adopting ecologically sustainable development principles.

Council's commitment to the issue of on-site sewage management is demonstrated through the continued implementation of this Strategy. When an opportunity arises for funding assistance from external sources (for example, from the State or Federal Governments), Council will support applications for project funding. Where appropriate, Council will apply for funding for specific programs or actions outlined in this Strategy, or for special projects in on-site sewage management which will result in a demonstrable benefit to the residents and ratepayers of the unsewered areas of Cessnock City.

Council also encourages the adoption of innovative on-site systems at both residential and community scales that will result in long-term sustainable and system management improvements.

LEGISLATION

The preparation of an On-Site Sewage Management Strategy is encouraged under the *Local Government Act 1993* and the *Protection of Environment Operations Act 1997* and their associated regulations. This legislation gives Councils the discretion to develop service support and supervision models that provide for the management of the impact of sewage pollution.

LOCAL GOVERNMENT ACT 1993

The design, installation and operation of OSSM systems are regulated under the *Local Government Act 1993* and it's associated Regulations. Under Section 68 of the Act, Council approval is required prior to the installation, construction or alteration of a waste treatment device, a human waste storage facility or a drain connected to any such device or facility.

The *Local Government (General) Regulation 2005* sets out specific requirements for OSSM approvals including matters for Council consideration, performance standards and circumstances where prior Council approval is not required. Part 2 of the Regulation incorporates the requirement for an Approval to operate an onsite sewage management system.

Issues associated with the management of decentralised sewage facilities are dealt with under the *Local Government (General) Regulation 2005,* the *Environmental and Health Protection Guidelines* (DLG, 1998) and the Australian Standards 1546 & 1547. The Regulation provides for greater protection of the environment and public health through tighter control of the performance standards of OSSM systems.

The Local Government Act also provides the ability to undertaken enforcement action through the orders provisions of Chapter 7 in particular sections 124(21), 124(22) and 124(22A). These orders permit Officers to stipulate the manner, in which a system is to be operated, things to be done or refrained from doing. In addition under s124 (24) Council can order an occupier or landowner to connect to the sewerage system when the property is located within 75metres of a sewer.

PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997

The *Protection of the Environment Operations Act 1997 (POEO Act)* provides local government with stronger powers to investigate complaints and to issue legally binding notices. Under the Act, local government is responsible for the regulation of activities for which it is the Appropriate Regulatory Authority (ARA). Council is the ARA for activities relating to OSSM systems not regulated or licensed by the DECCW.

A major component of any modern environmental protection program is efficient surveillance and enforcement to ensure compliance with Council requirements. Where a failing OSSM system is detected during a compliance inspection the following actions are available to Council under the *POEO Act*:

1. Clean-up Notices

Clean-up Notices may be used in situations where a quick response to a pollution incident is required. The Clean-up Notice carries an administration fee that must be paid to Council. There is no right of merit appeal against a Clean-up Notice.

2. Prevention Notices

Prevention Notices may be issued in situations where a sewage management system is being operated in an environmentally unsatisfactory manner. The recipient of a Prevention Notice must pay an administrative fee to Council.

3. Compliance Cost Notices

The *POEO Act* allows Council to recover any reasonable costs and expenses it incurs in monitoring action taken under either a Clean-up or Prevention Notice, ensuring the Notice is complied with and any other associated matters.

4. Penalty Infringement Notices

Where an OSSM system is failing or has the potential to discharge effluent to a waterway or the stormwater system, a Penalty Infringement Notice (PIN) may be issued. The recipient of a PIN must pay the fee or can elect to appeal the notice in the Local Court.

AS/NZS 1547:2000 ON-SITE DOMESTIC-WASTEWATER MANAGEMENT

This standard provides specific details for a range of domestic on-site sewage management facilities and land application areas for all persons and agencies involved with on-site sewage management in Australia and New Zealand. The Standard provides guidance for:

- system flows up to a maximum of 14,000L/week and population equivalent of up to 10 persons; and
- site investigation, land application system design, installation, operation and maintenance to achieve sustainable outcomes and public health performance.

AS/NZS 1546:1998 ON-SITE DOMESTIC WASTEWATER TREATMENT UNITS

Part 1: Septic tanks.

This standard is highly relevant to manufacturers of on-site sewage management facilities, by specifying technical means of system compliance and test specifications to achieve sustainable outcomes and public health performance.

Part 2: Waterless composting toilets.

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

Part 3: Aerated wastewater treatment systems.

This standard sets out performance requirements, design requirements, means of compliance, installation requirements, requirements for operation and maintenance and specifications for testing aerated wastewater treatment systems (*AWTS*) and associated fittings.

AS/NZS 3500 PLUMBING AND DRAINAGE

This standard is highly relevant to the licensed plumbers and installers who conduct repairs or alterations to existing on-site sewage management facilities or new installations.

This standard covers the requirements for the design and installation of any plumbing and drainage.

GUIDELINES AND STANDARDS

The State Government along with other agencies have developed a number of different guidelines and standards for use in designing and assessing OSSM. The following is an outline of these guidelines which are used by Council in the implementation of this Strategy.

ENVIRONMENT & HEALTH PROTECTION GUIDELINES 1998

- The *Environment and Health Protection Guidelines* were developed by the Department of Local Government in 1998. These guidelines provide Council with the tools for the effective regulation of OSSM systems. In order to achieve this, the Guidelines recommend that Councils should:
- Develop, implement and regularly review an Onsite Sewage Management Strategy.
- Develop site and system specific conditions of approval to operate onsite sewage management systems.
- Consider all relevant issues when approving the installation or operation of onsite sewage management systems, particularly environment and health issues, both within the site and on a catchment wide basis.
- Check that approval conditions are complied with by appropriate auditing and monitoring.
- Undertake ongoing householder education on issues including:
 - Statutory responsibilities of householders as operators of onsite sewage management systems.
 - Health and environmental risks associated with system use.
 - Specific issues related to the system installed.

The Guidelines also recommends that Councils should implement a program of OSSM audits to monitor the performance of systems and also to monitor the impact of onsite sewage management on a larger environmental scale.

AS/NZS 1547:2000 ONSITE DOMESTIC WASTEWATER MANAGEMENT

The objective of AS/NZS 1547:2000 is to provide guidance to all persons and agencies involved with onsite sewage management in Australia and New Zealand. The standard covers all matters relating to site investigation, land application system design, installation and operation and maintenance to achieve sustainable outcomes and public health performance. Council has adopted this standard as policy in order to ensure a uniform approach based on performance related outcomes.

DEPARTMENT OF ENERGY, UTILITIES AND SUSTAINABILITY: NSW GUIDELINE FOR GREYWATER REUSE IN SEWERED SINGLE HOUSEHOLD RESIDENTIAL PREMISES, 2007

These Guidelines provide direction on the use of greywater in single households and have been developed to assist property owners, system suppliers and council's in installing and approving greywater systems. The guidelines also outline the requirements for exemption from obtaining approvals from Council for installing greywater systems.

NSW HEALTH: GUIDELINES FOR ON-SITE SEWAGE MANAGEMENT

NSW Health has produced a set of guidelines for the accreditation and management of each of the different OSSM system types. The guidelines can be used by Council in determining system design and approval conditions.

ENVIRONMENTAL AND PUBLIC HEALTH ISSUES

In protecting public health and the environment, the *Local Government (General) Regulation 2005* specifies that an OSSM system must be operated in accordance with the following performance standards:

- The prevention of the spread of disease by micro-organism.
- The prevention of the spread of foul odours.
- The prevention of the contamination of water.
- The prevention of the degradation of soil and vegetation.
- The discouragement of insects and vermin.
- Ensuring that persons do not come in contact with untreated sewage or effluent (whether treated or not) in their ordinary activities on the premises concerned.
- The minimisation of any adverse impacts on the amenity of the premises and surrounding lands.

Public health protection requires Council attention to specific system failures, while the protection of the environment also requires attention to the cumulative impact of sewage pollution in the area.

Managing cumulative impacts is a difficult but core responsibility of Council's On-Site Sewage Management Strategy. It is particularly important to protect the natural waterways in the Cessnock LGA from pollution, including that caused by inefficient effluent disposal. In this regard, it is important to appreciate that many waterways suffer environmental degradation and public health risks as a result of small incremental increases in pollution from many different sources and not necessarily from large individual point sources.

Within the local environment pollution is a sensitive issue which can cause unnecessary stress, therefore careful control of OSSM systems is essential. Any disposal of on-site sewage effluent may contribute pathogens, opportunistic microbes and nutrients to local waterways unless reduction measures are used on site.

An understanding of the presence of pathogens in wastewater systems is also important because of the risks they pose to public health. The degree of risk is dependant on the nature of the wastewater system, its treatment, and the infectious dose of any pathogen present and the ability of an individual body to fight the organism.

PROGRAMS

APPROVAL PROGRAM

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

Approval to Install Onsite Sewage Management System

Section 68 of the *Local Government Act 1993* requires that property owners obtain an approval from Council to install, construct or alter a waste treatment device or a human waste storage facility, including an effluent disposal area.

Where an OSSM system is to be located in a sensitive location, best practice on-site sewerage management is to be implemented. Sensitive locations include blocks under 2000m² (for example, some properties in the village areas of North Rothbury, Abernethy, Millfield and Ellalong), where a standard system may not meet Council requirements.

Best practice on-site sewage management is the sustainable disposal of household sewage in a manner which meets the requirements of NSW Health, Council, the requirements of the *Environment & Health Protection Guidelines Onsite Sewage Management for Single Households*, and the *Australian Standard 1547(2000) – Disposal Systems for Effluent from Domestic Premises*. In order for an on-site sewage management system to be considered as meeting best practice the following standards are to be met at a minimum:

- Household plumbing must be certified by a licensed plumber to meet the requirements of the *National Plumbing Code AS3500:2006* and a certificate of compliance must be submitted to council from a licensed plumber.
- Sufficient land must be available for the disposal of treated sewage, ensuring that the requirements of *The Environment & Health Protection Guidelines Onsite Sewage Management for Single Households* prepared by the NSW Department of Local Government 1998 and the *Australian Standard* 1547(2000) – Disposal Systems for Effluent from Domestic Premises are met.
- The site must not be restricted by size, rock, bushland, waterways, or built structures to prevent the likelihood of significant environmental impacts from occurring.
- The irrigation area must not be used for recreational activities, growing of fruit or vegetables, vehicle movements or the keeping of agricultural animals.
- Tanks are to be in good working order and are to be fitted with baffles and an outlet filter.

Approval to Operate a System of Sewage Management

The Local Government (General) Regulation 2005 requires that an owner of an OSSM system obtain Council 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 lodge an application for approval with Council. For convenience, Cessnock City Council has designed both the application to install and the application for approval to operate on the same form. An Approval to Operate is valid for a period of twelve months, after which time the approval is renewed conditional to the system being maintained in accordance with the conditions of the original approval.

The operational approval will be issued for a new on-site sewage management system following a satisfactory final inspection by Council's Building Surveyor on the installation.

Where a change of property ownership arises, an approval to operate will be issued to the new owner, once Council receives information pertaining to the property transfer. In some cases this process can take up to two months.

Approval for Greywater Reuse

A greywater treatment system requires Council approval to install and operate under the *Local Government Act* 1993

A greywater diversion device does not require installation approval or an approval to operate if the system meets the following requirements:

- The property is in a sewered area.
- Installation in accordance with the NSW *Plumbing and Drainage Code of Practise*, 2006.
- Installation in accordance with the requirements of NSW Health, *Grey water Reuse in Sewered Single Domestic Premises*, April 2000.
- The following performance standards are achieved:
 - Prevention of the spread of disease by microorganisms
 - o Prevention of the spread of foul odours
 - o Prevention of contamination of water
 - Prevention of degradation of soil and vegetation
 - Ensuring that people do not come into contact with untreated sewerage or effluent in ordinary activities on the premises concerned
 - The minimisation of any adverse impacts on the amenity of the property and surrounding lands.

If a property has an existing OSSM system, an Approval to Operate from Council is required under the *Local Government Act 1993* and its Regulations for a greywater diversion device.

Commercial Systems

A Commercial Sewage Management Facility or a 'Package Wastewater Treatment Plant' can be described as any pre-fabricated or pre-engineered treatment system designed to accept and treat small to medium wastewater flows independent of a reticulated sewage system.

Any proposal not of a domestic nature, or expected to receive an equivalent daily wastewater volume between 10 EP and 2500 EP is typically regarded as a commercial sewage management facility, or a package wastewater treatment plant. If the applicant/proponent intends to install a commercial system, the application must be supported by all information required on the form - "Application to Install, Construct or Alter a Waste Treatment Device or Human Waste Storage Facility"

This will assist *Council* in the assessment and determination of the application.

Any commercial sewage management facility or package wastewater treatment plant is required to be designed by a suitably qualified and experienced environmental engineer or wastewater consultant. The system must be certified in writing by the qualified environmental engineer or wastewater consultant based on both the design and performance parameters.

The tank(s) must be certified in writing by a structural engineer. This certification must be provided as a supporting document to the Application to Install submitted to Council. The construction and installation of the system is required to be certified in writing by the installer, and must be provided in writing to Council prior to Council issuing an Approval to Operate for the system.

NOTE: In the interest of public health all commercial systems shall be fenced to prevent access from the public (fencing shall include lockable gates for maintenance access).

Revoking an Approval

Council reserves the right to revoke or modify any approval issued for the operation of a sewage management system. This may include reducing the duration of time an approval is valid for and/or placing additional conditions on the approval where a problem with a system is identified.

Revoking an Approval in Sewered Areas

Once sewer becomes available and the property connects to Hunter Water reticulated sewer, the existing approval to operate an OSSM for that property is withdrawn.

NOTE: Properties in sewered areas which have not as yet connected to Hunter Water reticulated sewer, the owner is still required to have current approval to operate their OSSM system.

Failure to Obtain Approval to Operate a System of Sewage Management

It is an offence under section 626 of the *Local Government Act 1993* to operate a system of sewage management without local government approval. Penalty Infringement Notices can be issued for either operating a sewage management system without approval or in a manner other than what was approved. In addition, the penalty for failing to apply to Council for an approval to operate a system of sewage management is a maximum of 20 penalty units.

INSPECTION PROGRAM

To ensure each on-site sewage management system in the Cessnock LGA is operated so as to protect public health and the environment, Council undertakes inspections of all systems regularly. Under the *Local Government (General) Regulation 2005*, all Councils have a duty to monitor the performance of existing systems and take action in relation to defective systems or systems which pose a risk to public health or the environment. Through implementation of corrective works, system replacement or simple changes in system operation, there has been a significant improvement in overall performance.

This Strategy outlines the performance based inspection program currently in operation. A compliance approach for the inspection of OSSM systems is consistent with Council's approach to its other environmental protection duties, and is considered the most equitable and effective method for ensuring that OSSM systems do not pose a risk to the environment or to public health.

Through the inspection program council can ensure that individual property owners and occupiers are acting responsibly and managing their sewage systems correctly. Due to the unique environments located in Cessnock LGA, a system can be achieving optimal performance but may still pose a potential risk to public health and/or the environment.

For this reason this Strategy makes a distinction between high risk systems and failing systems. Although high risk systems for on-site sewage disposal are common in the Cessnock LGA, failing systems are not acceptable and must be upgraded. High risk systems have been determined from a desktop study, however, failing systems can only be identified through the inspection of individual sewage management systems.

Inspection costs

Council does not charge an inspection fee for the routine inspection of an OSSM system where the owner operates and maintains their system in accordance with current health and environmental requirements. Where an owner or tenant fails to maintain their sewage management system in an environmentally acceptable or healthy manner, Council can use the legislative tools previously outlined to require remediation works to be undertaken and an additional reinspection fee will be charged. (For Council's schedule of Fees and Charges, go to www.cessnock.nsw.gov.au)

Notification of inspection

A property owner will be given notification of Council's intention to inspect their sewage management system. Notification is by letter, which specifies the date range when the system will be inspected. This is usually within a 30 day period. If a property owner wishes to be present at the time of inspection they will be given an opportunity to contact Council and arrange a mutually agreeable time for the inspection to take place.

If the Council Officer attends the property on the nominated date but is unable to either gain access to the sewage management system or complete the inspection, the property owner will be contacted by letter and a suitable time will be arranged for the inspection to be completed.

In circumstances where Council Officers are investigating complaints related to the inefficient or unsafe operation of OSSM systems Council Officers will attempt to contact system owners to arrange an agreeable time for an inspection. Inspections may be undertaken without notification to the property owner where Council believes that a system is failing and the officer reasonable suspects that pollution has been, is being, or is likely to be caused.

Assigning a risk-rating to the system

Following an inspection of a system by Council Officers the system will be given a risk-rating. Risk-ratings will be assigned by considering the limiting factors and features of the property, not the actual performance of the system at the time of the inspection.

SITE LIMITATIONS

| DEGREE OF LIMITATION | RISK CATEGORY |
|----------------------------|---------------|
| No limiting site factors | Low risk |
| Some limiting site factors | Medium risk |
| Very limiting site factors | High risk |

NOTE: Site Limitations used to assess the risk category of a system are outlined in tables 4 and 5 of The Environment & Health Protection Guidelines Onsite Sewage Management for Single Households prepared by the NSW Department of Local Government 1998.

Frequency of inspections

The inspection program for OSSM systems will be implemented with the least intrusion on residents and landowners. The risk of the system to the environment and to public health, not the type of system, will determine the frequency of inspections.

Reinspections of failing systems will be required until the system meets the current health and environmental performance standards. Council Officers will determine what follow-up action is required for failing systems and will negotiate with the owner a suitable schedule for upgrade work.

STAFF REQUIREMENTS

There is currently three (3) staff employed in the implementation of the OSSM program for Cessnock City Council. This includes two (2) Wastewater Management Officers and one clerical position.

The OSSM staff carries out the following core functions:

- 1. Complete programmed inspections;
- 2. Initiate action for upgrading and maintenance of OSSM systems;
- 3. Ensure all owners of OSSM systems obtain and maintain approvals to Operate;
- 4. Provide education and guidance on OSSM matters to the community, staff and Council;
- 5. Assist in assessing applications for the installation of new OSSM systems;
- 6. Monitor figures and reports for Aerated Wastewater Treated Systems to ensure proper servicing;

The current staffing levels need to be reviewed annually to ensure resources are adequate to successfully undertake the OSSM program in accordance with this strategy.

EDUCATION PROGRAM

This Strategy recognises the importance of continuing community involvement in the management of on-site sewage issues in the Cessnock LGA. The education program outlined in this Strategy is fundamentally linked to the other programs and will be implemented in conjunction with the inspection and approval programs.

Ongoing education is of great importance and assists individuals to meet regulatory requirements, improve their outlook on achieving sustainability and minimise health and environmental risks associated with the operation of OSSM systems. Education plays a key role in achieving beneficial and visible outcomes. Reviews of OSSM systems enable Council to assist system owners to better understand how their system works and how they can improve their actions to move towards sustainability over time.

Council has been proactive in implementing education programs within the community. The actions outlined in this Strategy relating to community education aim to satisfy the basic knowledge and awareness requirements of householders and land owners. The knowledge and awareness required of property owners and occupiers in relation to the operation and maintenance of OSSM systems includes:

- Health risks and how to manage them.
- Managing the environmental impact of wastewater.
- System operation and maintenance.
- Waste minimisation principles.
- Where to access information.
- Performance standards of OSSM systems.

Property owners and householders need to take an active role in the management of their on-site system. In order to do this it is essential that property owners and householders are aware of their responsibilities and have access to appropriate information and other resources to carry them out.

Cessnock City Council is undertaking the following measures in 2010 – 2012 to raise the property owners and householder's awareness of these issues:

- Developing and distributing "New Owners Kits" including information brochures, sink strainers, shower hangers and magnets, to all new owners;
- Updating the CCC website with information and relevant forms relating to onsite sewage management;
- Launching an ongoing newspaper advertising campaign to highlight local and current issues relating to on-site sewage management;
- Reviewing the forms and letters sent to property owners with a view to making the information disseminated as clear and concise as possible;
- Participating in community meetings in the villages affected by Hunter Water Priority Sewage Scheme to inform householders about the process, related issues, and projected timelines of the scheme.
- Ongoing education with owners during inspection program.

STRATEGY REVIEW

It is proposed that a review of this Strategy will be undertaken within two (2) years of its implementation and then every two (2) years on an ongoing basis. The review is intended to assess the information gathered over the inspection program to build a clearer picture of the state of Cessnock City Council's on-site sewage management systems.

CONCLUSION

This Strategy seeks to develop appropriate OSSM operation and maintenance techniques with system owners. It is expected that this will be achieved through oneon-one consultation, inspection programs and delivery of educational material.

Through effective use of this Strategy, the number of failing systems in Cessnock City Council area should be reduced, thus reducing public health and environmental impacts associated with the use of on-site sewage management systems.





REFERENCES

- Department of Local Government (1998) Environment and Health Protection Guidelines: Onsite Sewage Management for Single Households, Department of Local Government.
- Department of Environment and Climate Change and Water (DECCW)
- Department of Health (2000) Greywater Reuse in Sewered Single Domestic Premises, Department of Health.
- Department of Health (2001) Septic Tank and Collection Well Accreditation Guideline.
- Department of Health (2005) Sewage Management Facility, Sewage Treatment Accreditation Guideline.
- Department of Health (2005) Waterless Composting Toilet Accreditation Guideline.
- Local Government Act 1993 (Copies can be searched or downloaded from http://www.austlii.edu.au/databases.html#nsw)
- Local Government (General) Regulation 2005 (Copies can be searched or downloaded from http://www.austlii.edu.au/databases.html#nsw)
- Local Government (General) Amendment (Domestic Greywater Diversion) Regulation 2006 (Copies can be searched or downloaded from http://www.austlii.edu.au/databases.html#nsw)
- Protection of the Environment Operations Act 1997 (Copies can be searched or downloaded from http://www.austlii.edu.au/databases.html#nsw)
- Cessnock City Council, Environmental Health Team.

FURTHER INFORMATION

General information on On-Site Sewage Management Systems can be obtained via our website: <u>www.cessnock.nsw.gov.au</u> or by phone: 4993 4100.