On-Site Sewage Management (OSSM) Policy

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Contents

1 INTRODUCTION

1.1 *Background:*

This policy document outlines Council's commitment to domestic sewerage and wastewater management in unsewered areas and defines how the risks associated with the widespread use of On-Site Sewage Management Systems (OSSMs) are monitored and managed within the Queanbeyan-Palerang Regional Council (QPRC) Local Government Area (LGA).

Almost all of the QPRC LGA is part of a catchment supplying drinking water to Sydney, Canberra, Queanbeyan, and local towns such as Bungendore, Braidwood and Captains Flat.

Currently within the QPRC LGA there are approximately 5000 (OSSMs) in the former Palerang LGA and 700 in the former Queanbeyan LGA. The former Palerang has been coordinating a successful OSSM inspection program since 2006. It is suggested that QPRC follow this successful model, incorporate the best of the former Palerang model and improve the OSSM program for the new LGA.

The failure of OSSM systems has been known to contaminate water supplies and can be a source of serious environmental and public health concern. As a result, a series of objectives were developed by the NSW Office of Local Government to manage these concerns. These included:

- Prevention of public health risk;
- Protection of lands and community amenity;
- Protection of surface waters and groundwaters; and
- Conservation and reuse of resources.

1.2 *Aims*

The aims of the QPRC On-Site Sewage Management Policy are to:

- Guide property owners towards sustainable on-site management of domestic/business/commercial sewage and wastewater (excluding Liquid Trade Waste – see Palerang Council Liquid Trade Waste Policy for details);
- Protect and enhance the quality of public health and the environment in the long term within the QPRC LGA;
- Co-ordinate environmental assessment, data collection and monitoring which is related to On-Site Sewage Management;
- Assist Council to prioritize resources for the efficient regulation and monitoring of on-site sewage management systems within its area;
- To support water quality objectives in the drinking water catchments; and
- To ensure that all on-site sewage management systems in the QPRC area meet the various water catchment Authorities current recommended practices and standards.

1.3 *Scope*

This Policy applies to all fixed on-site sewage management systems in the QPRC Council area that are not directly connected to the public sewage system. This Policy applies to all land within the QPRC Local Government Area with the exception of National Parks as outlined in the Department of Local Government Circular 99/59. This policy, when adopted, will replace the existing Queanbeyan City Council On-Site Sewage Management Plan and the Palerang Council On-site Sewage Management Policy.

1.4 *Objectives*

The objectives of this On-Site Sewage Management Policy are to :

- Ensure transparency, consistency and fairness in the manner in which council deals with OSSM;
- Assess and regulate the design, installation and operation of OSSM systems in the Queanbeyan-Palerang Regional Council area;
- Enhance and protect the environment and public health from potential OSSM impact;
- Promote awareness of the on-going requirements with respect to operating an OSSM.

1.5 *Goals*

- To maintain the database of all existing on-site sewage systems (known as the OSSM database) and ensure all new systems are captured in the database;
- To develop and implement a cost effective supervision program for on-site sewage management systems;
- To adopt a partnership approach with householders and service agents to support continual improvement of on-site systems;
- To provide education and information for operators of on-site sewage management systems
- To ensure that all onsite systems are inspected at regular intervals and are desludged and maintained as required;
- To ensure that all residents with Aerated Wastewater Treatment Systems consult with service agents and submit quarterly maintenance reports;
- To ensure that all land application areas comply with environment and health protection standards as well as Council operating requirements; and
- To review council development standards and approval criteria for subdivision, development and building to ensure that appropriate provision is made for on-site sewage management when residential development occurs in non-sewered areas.

2 LEGISLATIVE OBLIGATIONS AND/OR RELEVANT STANDARDS

2.1 *Legislation*

This Policy is to be read in conjunction with the latest available editions or revisions of:

- The Local Government Act 1993;
- Local Government (General) Regulation 2005;
- Environmental Planning and Assessment Act 1979;
- Environmental Planning and Assessment Regulation 2000;
- Plumbing and Drainage Act 2011; and
- Protection of the Environment Operations Act 1997.

State legislation specifies that all on-site sewage management facilities in the Local Government area are required to be registered (by way of lodging an application for approval to operate the OSSM facility) with QPRC. This applies to both new and existing systems.

2.2 *Standards Applying to On-site Sewage Management Systems*

In implementing the On-site Sewage Management Policy Council will adhere to the following standards:

- All new human waste treatment devices shall be accredited by NSW Health Department;
- AS3500 National Plumbing and Drainage Code;
- AS1546 On-site Domestic Wastewater Treatment Units (part 1 applies to septic tanks);

- AS1547 On- site domestic wastewater management;
- AS4419 Soils for Landscaping and Garden Use;
- AS2698 Plastic Pipes and Fittings for Irrigation and Rural Applications;
- AS3000 Wiring Rules – Electrical Installation – Buildings, Structures and Premises;
- AS1319 Safety Signs for the Occupational Environment;
- Department of Local Government - Environment and Health Protection Guidelines: On-site sewage management for single households, (aka 'Silver Bullet') http://www.dlg.nsw.gov.au/DLG/Documents/information/onsite.pdf;
- Sydney Catchment Authority - Neutral or Beneficial Effect on Water Quality Assessment Guidelines http://www.sca.nsw.gov.au/publications/publications/136;
- Sydney Catchment Authority - Designing and Installing On-Site Wastewater Systems http://www.sca.nsw.gov.au/publications/publications/designing-and-installing-on-site-wastewater-systems;
- New South Wales Department of Energy, Utilities and Sustainability - NSW Guidelines for Greywater Reuse in Sewered, Single Household Residential Premises;
- NSW Health Advisory Note 3 – May 2006: Destruction, Removal or Reuse Of Septic Tanks, Collection Wells, Aerated Wastewater Treatment Systems and other Sewage Management Facility Vessels http://www.health.nsw.gov.au/environment/domesticwastewater/Documents/adnote3.pdf

3 COUNCIL'S OSSM INSPECTION PROGRAMS

3.1 *Maintenance of OSSM Database*

Information provided to Council as part of the application to operate an On-site Sewage Management facility will form the basis of the information database. Information collected during the inspection will be included to provide a comprehensive record of each OSSM.

3.2 *Education/ Promotion*

It is important that owners of OSSM understand how their system operates and the possible consequences of a faulty or mismanaged system. Older houses with on-site systems may have been bought and sold a number of times and current owners may not even know where the system is located.

Council recognises the responsibility to provide appropriate information to owners. This will be through Council's inspection program which will include informal education of owners on site and distribution of information and fact sheets. Information will also be available on the Council website.

3.3 *Inspection of OSSMs*

Council officers will audit individual sewage management facilities having regard to the performance standards specified in AS/NZS 1547:2012 – On-site Domestic Wastewater Management and the Environment and Health Protection Guidelines for "On-Site Sewage Management for Single Households".

Information will be recorded about the location, type and condition of the system in operation and Council may direct the property owner to carry out rectification works on the system to achieve compliance with the relevant statutory requirements for on-site wastewater management. AS/NZS 1547:2000 provides the requirements for primary and secondary treatment units and associated land application systems. The Standard gives specific details for septic tanks for domestic wastewater, and for land application and absorption systems. Information regarding system selection and sizing, site and soil evaluations, and general management of on-site domestic wastewater systems (including operation and maintenance) is also covered in the Standard.

The circumstances in which Council will inspect an OSSM are as follows:

- Initial inspection of an existing OSSM;
- Re-inspection of an existing OSSM due to failure, modification or upgrade;
- Re-approval of an existing OSSM;
- Initial inspection of a new system; and
- Council becomes aware of a potentially failing OSSM.

4 REQUIREMENTS FOR APPLICATION AND APPROVAL

Under the Environmental Planning and Assessment Act 1979 there are various phases where on-site sewage management is considered:

- Rezoning - when a local environmental plan/local environmental study (LEP/LES) is prepared to zone or rezone land. This may include detailed land capability assessment on the suitability of land for OSSM's.
- Subdivision - when a development application (DA) is submitted for the subdivision of land, or
- Single Dwelling – when a DA is submitted for the construction of an individual dwelling on an allotment of land after subdivision.

4.1 *Subdivision and Rezoning*

An on-site effluent disposal (land capability assessment) report prepared by a geotechnical engineer, soil geologist, soil scientist or other suitably qualified and competent person, experienced in on-site effluent disposal, shall accompany an application to subdivide or rezone in un-sewered areas.

The land capability assessment report shall provide the following:

- A site assessment of the subject property and soil capabilities on its suitability for the disposal of effluent on each of the proposed allotments that make up the subdivision. Hydraulic loading, wet weather storage, water and nutrient balance shall be included in the calculations. Calculations are to be included in the report.
- Soil test results in accordance with The Environment and Protection Guidelines 1998 - On-Site Sewage Management for Single Households and AS/NZS 1547:2012 for each allotment from the registered NATA laboratory used to test the soil.
- Mitigation measures where moderate or major limitations are identified within the soil parameters.

4.2 *Site and Soil Assessment Report*

A Site and Soil Assessment Report (GEOTEC) will advise the most appropriate technology for the dwelling on the development. The report is to be prepared by an experienced and appropriately qualified wastewater consultant and in accordance with *The Environment Protection Guidelines 1998 – On-Site Sewage Management for Single Households and AS/NZS 1547:2012*. The consultant will refer to the current version of *AS/NZS 1547 Onsite Domestic Wastewater Management and the Department of Local Government's 'Silver Book'* following the site assessment.

This assessment will provide or recommend the following:

- A detailed site and soil assessment which takes into account the climate, topography, geology, hydrology and vegetation.

- Soil test results in accordance with *The Environment and Protection Guidelines 1998 - On-Site Sewage Management for Single Households and AS/NZS 1547:2012* for each soil test required. Copies of NATA registered laboratory test results are to be provided with the report.
- The most appropriate on-site sewage management facility to accommodate daily wastewater flows.
- The location and size, including dimensions of the most appropriate type of land application system.
- Mitigation measures where moderate or major limitations are identified within the soil parameters.

This information must be provided in the on-site wastewater report and submitted as part of the development application.

4.3 *Approval to Operate a System of Sewage Management*

Under section 68 of the NSW Local Government Act 1993 approval is required to operate a system of sewage management. QPRC is the approval authority for on-site systems within the QPRC LGA. All wastewater (black and grey) is to be directed to the on-site sewage management system for treatment.

When a new OSSM is installed, usually associated with a development application for a dwelling, the approval to install and operate are managed by the development application process of Council. Ongoing operation approvals, are managed by the OSSM compliance function of Council. Under section 103, activity approvals, these approvals generally lapse after 5 years unless specified in the terms of approval. Council may determine to extend or renew an approval (but without changing the terms of the approval) if satisfied there is good cause for doing so.

The general process for obtaining ongoing Approval to Operate an existing OSSM is:

- The operator (generally the landowner) must apply to Council for an approval to operate, or Council monitoring identifies a possible OSSM that has an expired approval and requires re-approval;
- A council officer will inspect the site and complete an assessment to determine whether the system is functioning according to relevant standards;
- An approval to operate with a set of conditions is sent to the landowner along with any other relevant information.

4.4 Approval of a New OSSM

Under the provisions of Clauses 40 and 41, Local Government (General) Regulation 2005, a local council must not approve of the installation of certain sewage management facilities unless they have been accredited by the NSW Department of Health. This is the only statutory role of NSW Health in on-site single domestic wastewater management.

The types of sewage management facilities to which accreditation applies include:

- Septic tanks
- Collection well
- Aerated wastewater treatment systems
- Greywater treatment systems
- Wet and Dry Composting and incinerating toilets available for purchase by retail.

A full list is detailed in Clause 40 of the above regulation and only includes sewage management facilities which treat sewage of a domestic nature from premises occupied by a maximum of 10 persons or where the average daily flow of sewage is less than 2000 litres.

Current Register of Accredited Sewage Management Systems can be found at www.health.nsw.gov.au. Accredited sewage management facilities are required to provide the following prior to initial operating approval being issued:

- Full specifications of the on-site sewage management system to be installed.
- A copy of the current Certificate of Accreditation from the NSW Health Department.

4.5 Development Application Requirements

4.5.1 Site Map

A site map is to be provided with each new installation which includes the following:

- Drawn to a suitable scale;
- Distances from boundaries, any buildings and other structures located within from 100m of the proposed effluent management system;
- Position of onsite sewerage system;
- The position of drainage network, water courses, drainage depressions and dams, roads and open drains;
- Any environmentally sensitive areas of, any land located within 100 metres of the sewage management facility or related effluent application areas; including any ground water bores located within 100m of the effluent management area and their use, Groundwater bores within 100m and if <100m then the site plan must be accompanied by a statement from the owner of the bore that it is not used for potable domestic water supply;
- Reference to all related features within The Environment and Protection Guidelines 1998 - On-Site Sewage Management for Single Households and AS/NZS 1547:2012 to the set buffer distances.
    - Vegetation and shading/exposure;
    - Orientation;
    - Any poor drainage/wet seepage areas and springs;
    - River flats/floodplains or flood planning level;
    - Existing wastewater management structures and effluent management areas;
    - Slope (%);
    - General land form;
    - Areas of runoff;
    - Rock outcrops and geology;
    - Stormwater management structures and erosion control measures;
    - livestock yards;
    - Buffer distances;
    - Exposed soil/erosion potential/fill;

4.5.2 Buffer Distances for Effluent Disposal Areas

Buffer zones are required to be kept between on-site systems and sensitive environments, including property boundaries, driveways, buildings, bores and swimming pools.

It is necessary, when installing on-site disposal systems, to ensure that sufficient viable land is left for activities where human contact with land application areas are minimised, for example clothes drying and recreation within the yard of each premises.

Associated with this are buffer zones around the disposal field to minimise impacts on the surrounding environment and to reduce the potential for human contact with wastewater.

The standard buffer zones under the guidelines for all systems are:

Table 1. Buffer Distances

System	Recommended Buffer Distances
Treatment/ Storage Tanks	• 6m if tanks are upgradient and 3m if tanks are downgradient of below ground potable water tanks • 3m from land application system • 1.5m from dwelling
All land application systems	• 100m to permanent surface waters (eg. rivers, streams, lakes) or 150m to a SCA named river* • 250m to domestic groundwater well • 40m to other waters (eg farm dams, intermittent waterways and drainage channels)
Surface spray irrigation	• 6m if area up-gradient and 3m if area down-gradient of driveways and property boundaries • 15m to dwellings • 3m to paths and walkways • 6m to swimming pools
Surface drip and trickle irrigation	• 6m if area up-gradient and 3m if area down-gradient of swimming pools, property boundaries, driveways and buildings
Subsurface irrigation	• 6m if area up-gradient and 3m if area down-gradient of swimming pools, property boundaries, driveways and buildings
Absorption system	• 12m if area up-gradient and 6m if area down-gradient of property boundary • 6m if area up-gradient and 3m if area down-gradient of swimming pools, driveways and buildings. • SCA area 15m down slope to in-ground potable water tanks or in ground swimming pools. Should not be located upslope of feature.

❖ *SCA – Sydney Catchment Authority, Reference to the SCA NorBE Assessment Guideline*

5 Existing systems

All existing OSSM are required to be registered and receive the relevant approval from Council. Under section 103, activity approvals, these approvals generally lapse after 5 years unless specified in the terms of approval. They must then be re-approved. An Approval to Operate will only be issued, where the installation and operation complies with s68 of the *Local Government Act 1993* and the objectives of this strategy.

To implement the approvals process:

- Audit the established OSSM databases to establish change of ownership and change of land details if subdivision has occurred.
- Complete a desktop study to identify any existing OSSM which do not appear on a database. Application forms to be sent to all identified owners.
- Complete a desktop audit to determine risk category for each application and determine how long the approval is valid for based on risk category.

- Once an application is received by Council, applicants are entitled to continue to operate their system until the application is finally determined, at which time the notice of the determination will be issued.
- The desktop audit of the applications received will assist in developing the inspection program based on potential or actual risk to public health and the environment.
- Approvals will be established/renewed or rejected and Notice may be issued for improvement works.

5.1 New Applications

New applications for an Approval to Operate can be applied for in two different situations:

1. When a new development has occurred and a new on-site sewage management system has been installed. An Approval to Operate an on-site sewage management application shall is applied for as part of an Interim/Final Occupancy Certificate.
2. When a change of ownership of land has occurred. The Approval to Operate is issued to the operator/owner of the property and does not run with the land. New landowners are required to obtain their own Approval to Operate irrespective of whether the previous owner had an Approval to Operate or not.

The fee for an application for an Approval to Operate is available from Councils – Fees and Charges.

5.2 *Renewal of Approval with Transfer of Title*

Transfer of Ownership

- Title transfers and is updated in Council's property system on a regular basis.
- The Public Health and Environment section will be notified of all transfers by the Rates department monthly.
- New owners to be forwarded an Application for an Approval to Operate an On-Site Sewage Management System together with relevant information for new owners.
- Applications to be returned within 28 days of receipt.

The regulation provides that a person, who purchases land, a period of three months from the date on which the property is transferred to obtain their own Approval to Operate from Council. Additionally, a person who purchases (or otherwise acquires) land on which an on-site sewage management system is installed, applies for an approval within 28 days from the transfer of title, they may continue to operate the system until such time as the application has been processed.

5.3 *Applications to alter an existing system*

An application is made to Council using the QPRC, section 68, "Carry Out Water, Sewage and Stormwater Work" Form to alter an existing system. An alteration may be applied for due to an increase in the number of bedrooms associated with the dwelling on the property, an environmental issue arising from the existing system or other reasons such as age, efficiency, energy use considerations or landholder preference. Depending on the circumstances additional information may be required to the same level as required for a new application, for e.g. Council may require a Site and Soil Assessment Report (GEOTEC) by an accredited consultant and depending on location, an assessment consistent with the Sydney Catchment Authorities "Neutral or beneficial effect on water quality assessment guidelines".

QPRC urges property owners to contact Council staff to discuss individual cases as requirements for information may differ, particularly if the existing system does not meet the current buffer guidelines.

5.4 Installation

The On-site Sewage Management System to be installed or constructed must be accredited by the NSW Department of Health. The proposed operation, maintenance and servicing arrangements must be undertaken in accordance with the manufacturer's specification. Council shall not approve a system that does not have a current accreditation from the Director-General of the NSW Department of Health.

All systems should be installed according to NSW WorkSafe requirements and AS/NZS 3500 (Set):2003 Plumbing and Drainage Set.

5.5 Renewal of on-site wastewater approvals

All On-Site Sewage Management Systems currently require approval in accordance with *s68 Local Government Act 1993*. Each site is to be assessed by the determining assessing officer and appropriate conditions of approval imposed. Fees associated with this approval process are outlined in Councils Fees and Charges Policy.

Aerated systems (AWTS) shall continue to have quarterly services from an appropriately qualified service contractor with all reports and documentation held together on site and copies submitted to Council.

Approvals to operate an OSSM under Section 68 of the Local Government Act are only issued for a specified period of time (2 years or 5 years depending on their individual risk assessment) and must be renewed before expiry. To ensure that OSSMs comply with legal requirements, all OSSMs need to have a current approval to operate. After installation, all OSSMs are require to be maintained in accordance with Section 5 of the Silver Book and AS/NZS 1547:2000

Note: Greywater reuse will require a separate approval.

5.6 Effluent irrigation

Subsurface irrigation will be required if the:

- Average annual rainfall exceeds 1200mm,
- Neighbouring dwellings are within 100m of the proposed effluent management area,
- Effluent management area slope is greater than 7%,
- The effluent irrigation area needs to be regularly mowed to maintain a maximum height of 100mm to remove nutrients for long term sustainability.
- Areas of extended frost.

Where surface irrigation is proposed, moveable hoses, including semi fixed systems will not be acceptable.

5.6.1 Unacceptable practices

The following systems will not be acceptable:

- Trench system longer than 200m;
- Absorption systems where soil is medium or heavy clay;
- Absorption systems where there is less than 0.75m of soil;
- Trenches more than 20m long except where they are made of 2 separate inline trenches with a central feeder or where trenches are pressure dosed from a pump well;
- Amended soil mounds with slopes of more than 7%;
- Solar powered systems where continuous power is required for normal operation such as aerated wastewater treatment systems;
- Reed bed systems except in exceptional circumstances;
- Pump out systems for domestic use.

5.7 *Aerated Water Treatment Systems (AWTS) quarterly reports*

All Aerated Water Treatment Systems (AWTS) are required to have quarterly services from an appropriately qualified service agent with all reports and documentation held together on site and copies submitted to Council. These can be posted, emailed or faxed, with clearly marked addresses, property number and OSSM number provided to you by Council in documentation related to your system.

5.8 *Minimum Standards for AWTS*

AWTS Systems are required to be serviced and maintained in accordance with the conditions of their NSW Health Certificate of Accreditation and Manufacturers specifications. At a minimum service agents should check all mechanical components of the system, check the irrigation/disposal area and test effluent qualities for parameters such as pH, dissolved oxygen and free residual chlorine.

6 Existing Pit Toilets

Pit toilets (or cess pits, long drops) have historically been used as a low cost form of sewage disposal, particularly in remote areas. However, they pose a potential to contaminate groundwater and surface waters and are not considered appropriate.

New pit toilets applications will not be accepted in QPRC area. Pit toilets have a high potential to contaminate groundwater, allow breeding of insects which potentially carry disease and create unpleasant odours.

At end of life existing pit toilets are to be decommissioned. When they are nearly full they must be filled up with soil. Contents of the well must not be broadcast or discharged above ground. If a pit is to be decommissioned, the property owner is required to notify Council in writing including the proposed date of decommissioning.

An alternate approved system must be provided. For short term weekender cottages with low usage, it is suggested a dry or wet composting toilet would be more suitable. Any new system must be accredited with NSW Health and approved by Council.

7 Fees and Charges:

Council has adopted the proposal to include ongoing On-site Sewage Management System fees as a rates charge (outlined in QPRC's current Fee's and Charges Schedule) which is split over the life of the approval and includes OSSM fees components for:

- Scheduled inspection
- Maintenance of OSSM data base
- Application & Renewal of Operating Approval

The fees which are charged are updated annually in accordance with QPRC's Annual Fees and Charges Policy.

Property owners with OSSM systems which require a re-inspection due to system failure will incur an inspection fee as set in Council's Fees and Charges.

8 Performance Standards

The Council must prescribe performance standards when determining applications for approvals to install or operate on-site sewage management facilities. Minimum performance standards are specified by the Division of Local Government under s44 Local Government (General) Regulation 2005, the Council cannot approve any application that will not comply with relevant Regulations. These minimum performance standards are listed below.

An on-site sewage management system must be designed, installed and operated to ensure that the following environmental and health performance objectives will continue to be met over the long term:

- The prevention of the spread of disease by micro-organisms;
- 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 into contact with untreated sewage or effluent in their ordinary activities on the premises concerned;
- The minimisation of adverse impacts on the amenity of the premises and surrounding lands;
- If appropriate, provision for the reuse of resources including nutrients, organic matter, and water.

8.1 Risk Classification System:

New sites shall be given a risk rating at the time of approval and existing sites at the time of the first inspection. The risk rating known as the OSSM Risk Assessment Matrix (Appendix 1) shall determine the frequency of inspections which are:

- **High** – inspected every two years;
- **Medium** – inspected every five years.

The risk rating is determined on the potential of the system's impact using the following criteria:

- Impact on public health;
- Impact on water quality;
- Impact on community amenity;
- Impact on soils.
- Impact on stock health

In determining the risk classification, and subsequently the approval period for each sewage management facility, Council has taken into consideration the following factors:

- Distance from nearest body of water (vicinity of system to rivers, creeks, drainage depressions and dams increase the risk of contamination in the event of failure);
- Area of land (ie residential blocks are higher risk sites than rural properties);
- Soil type (affects moisture absorption ability);
- Distance to downhill boundaries (affects potential for off-site impacts);
- Number of bedrooms/occupants of premises (affects potential load on the system and risk of failure);
- Landfall/slope (affects potential spread of contaminated water);
- Level of groundwater/nearest bore (potential to contaminate groundwater);
- Arrangements for stormwater diversion (whether a diversion bank/drain is installed and the likelihood of stormwater entering the system area);
- Type of system proposed/in use (affects potential for a contamination event);
- Proximity to human activity (closer increases the contamination risk).

Note: See OSSM Risk Assessment Matrix (Appendix 1)

8.2 Downgrade of risk rating

The risk classification may be reviewed periodically and an OSSM may be reclassified upon formal request. This may be after inspection through minor improvements, such as reviewing the footprint size or a better choice of a disposal system for certain soils.Alternatively, a different system can need to be installed to reduce the risk level.

Generally, property owners with OSSM systems rated as high who have demonstrated a high level of care and maintenance of their system may apply to council to have their risk rating downgraded if they meet the following criteria:

a. No defects have been identified for the last 3 inspections (high risk);
b. The property has remained in the same ownership during the above inspections;
c. The property is owner occupied (not tenanted or holiday rental);

Consideration will be given to the level of risk to public health and the environment when assessing the application.

In the event that a system is reclassified, the approval period and associated fees and charges will be updated and reflected in the Rates Notice for that property in the following financial year.

8.3 Upgrade of risk rating

Property owners with OSSM systems that are observed to be poorly preforming and/or that pose a risk to public health and/or the environment may have their risk rating upgraded if the following criteria are met:

a. Compliance action has been required pertaining to the operating performance of the OSSM; or
b. Defects have been identified for the last 2 inspections.

8.3.1 Commercial

All Commercially used properties operating an OSSM will be classed as High risk. The frequency of inspections will be determined from the properties assessment in accordance with the OSSM Risk assessment Matrix (Appendix 1) at the time of approval and existing sites at the time of first inspection.

9 Compliance Enforcement

Council's enforcement powers should only be utilised when other approaches have failed. Council's enforcement procedures are outlined within Council's Enforcement Policy and is aimed at giving the property owner/occupier every opportunity to comply with Council's requests prior to enforcement proceedings being instigated.

Areas for investigation include the following:

- Operating without prior Council Approval
- Operating otherwise than in Accordance with terms of Approval
- Dwellings with inadequate or failed systems
- Pollution Incidents

Adequate powers exist under the provisions of the *Local Government Act 1993 and the Protection of the Environment Operations Act 1997*, to ensure compliance with this policy, to require OSSM owners to obtain approval to operate, and to require maintenance of systems to an acceptable standard.

9.1 Power of Entry of Authorised Officers

Section 191 of the Local Government Act 1993 allows *Authorised Officers* of Council to enter premises for the purposes of enabling Council to exercise its functions. These functions include issuing approvals to operate OSSMs in accordance with Section 68 of the Act.

Section 192 of the Local Government Act 1993 describes what Councils can do whilst undertaking inspections. In relation to OSSM inspections, Council Authorised Officers are able to:

(a) inspect the premises and any food, vehicle, article, matter or thing on the premises, and

(b) for the purpose of an inspection:

- open any ground and remove any flooring and take such measures as may be necessary to ascertain the character and condition of the premises and of any pipe, sewer, drain, wire or fitting, and
- require the opening, cutting into or pulling down of any work if the person authorised has reason to believe or suspect that anything on the premises has been done in contravention of this Act or the regulations, and
- take measurements, make surveys and take levels and, for those purposes, dig trenches, break up the soil and set up any posts, stakes or marks, and
- require any person at those premises to answer questions or otherwise furnish information in relation to the matter the subject of the inspection or investigation, and
- examine and test any meter, and
- measure a supply of water, and
- take samples or photographs in connection with any inspection.

9.2 Notice of Entry Documentation

Council are required by Section 193 of the Local Government Act 1993, to give written notice of their intention to enter premises for the purpose of conducting an inspection. Property owners will be notified in writing a minimum of 14 days prior to the scheduled date for the inspection.

Property owners are able to be present for the inspection, but are not required to be. The inspector does not require access to any residential buildings on the property. Property owners are to ensure that gates are not locked on the inspection date or gate keys are made available and animals that may pose a risk to visitors are restrained, otherwise arrangements for access are to be previously arranged.

In terms of pollution events, authorised officers may enter properties (except the residential dwelling part) under the *Protection of the Environment Operations Act 1997,* without prior notice.

9.3 *Provision of Access:*

In most cases property owners allow Council staff to enter their properties for the purposes of conducting an OSSM inspection. However, in some cases property owners repeatedly deny access by locking gates. If a property is not able to be accessed on the scheduled inspection date and other arrangements have not been made, Council will issue a letter requiring urgent contact within 14 days.

If no contact is made, Council may use its power under Section 194 of the Act to enter the property by force. This will be by cutting chains to allow access and relocking the gate with a split link.

9.4 Inspection Procedure

During the inspection Council Officers will locate the OSSM on the property either by previously recorded GPS coordinates or visually locating the system. Council officers will examine all aspects of the OSSM including the tank/s, associated pipework and land disposal area.

The OSSM will be given a risk rating at the time of approval as described in *section 9. Risk Classification System* of this Policy.

In addition to risk rating, the OSSM performance will be checked to ensure compliance with Public Health and Environmental Standards. Systems which are performing in compliance with the standards will be issued with an approval to operate in accordance with their assessed risk rating.

Systems which fail to meet performance standards will require repair, upgrade, or in the case of serious failure, complete replacement.

A flowchart showing Inspection procedure is provided in Appendix 2.

9.5 Council officers cannot locate system

If during the inspection a Council Officer cannot locate the system on the property, the property owner will be notified in writing and asked to provide location details for the system and the land application area within 30 days from the date on the letter. A date will be rescheduled with the property owner at time of contact.

9.6 Failing Systems

OSSM systems that are failing to meet the public health and environmental standards required by the Local Government Act and Australian Standard 1547-2012 pose significant risks to both public and environmental health. Council has legislative obligations which require action to be taken to prevent public health and environmental risks by ensuring that failing OSSM systems are repaired in a timely manner.

9.6.1 Initial Notification of Failure

Property owners with systems that are failing to meet the conditions for a reissue of approval and/or performance requirements will be notified in writing of the failure. This letter will include reasons for the failure. Property owners will be required to consult a licenced plumber for advice on the system and possible rectification options and then, to notify Council in writing of proposed works prior to any work commencing on the system and within 30 days of the date on the letter (this is not applicable when emergency repairs to the system are required – refer to 5.83 *Emergency Orders*)

The type of works proposed to be undertaken may require further approval from Council. This generally applies when a full replacement of the system or disposal area is required. In this case, property owners will be required to lodge an application under Section 68 of the Local Government Act 1993 and provide supporting information including a site plan, geotechnical assessment report and accreditation details of the new system components (refer to *section* 5.5 Installation of a new OSSM).

9.7 Reinspections

Council will reinspect failing systems 90 days after the date of the initial failure letter. Systems which have been rectified and are assessed as meeting appropriate performance standards will then be risk rated and an Approval to Operate will be issued in accordance with this rating.

A reinspection of an OSSM will incur a reinspection fee as per Councils Fees and Charges Policy.

Systems which fail to meet performance standards at the reinspection will be issued with a Notice of Proposed Order under the Local Government Act 1993. This notice triggers a legislative process in which Council can assure that required works are carried out. This process will also result in increased costs to property owners as Penalty Infringement Notices may be issued for non-compliance with an order.

9.8 Orders

Where discussions with property owners fail to ensure that repairs are undertaken to rectify failing OSSM Systems, Council has a number of options under Section 124 of the *Local Government Act* to order property owners to comply with requirements. Council can issue the following orders that:

- Require action to be taken to bring a sewerage system into compliance with relevant standards or requirements (Order No. 5)
- Require owners or operators to do or refrain from doing such things to prevent environmental damage or repair environmental damage (Order No. 11)
- Require an activity on a premises (such as operating an OSSM) where the activity is or may constitute a threat to public health or safety to cease (Order No. 15)
- Require action to maintain a premises in a healthy condition (Order No. 21)
- Control waste on premises where the waste is not being dealt with satisfactorily (Order No. 22)

- Require the connection to a public sewer where the sewer is within 75 metres and available for connection (Order No. 24)
- Require owner or operators to use or not to use a human waste storage facility (Order No. 25)
- Require compliance with an approval (Order No. 30)

Note: Orders may also be issued under Protection of the Environment Operations Act 1997

9.8.1 Notice of Intention to Serve Order

Before issuing an Order under Section 124 of the Local Government Act, Council is required to comply with the order process as set out below:
Section 132 of the Act states:

> *"Before giving an order, a council must give notice to the person to whom the order is proposed to be given of its intention to give the order, the terms of the proposed order and the period proposed to be specified as the period within which the order is to be complied with.*
> *The council's notice must also indicate that the person to whom the order is proposed to be given may make representations to the council as to why the order should not be given or as to the terms of or period for compliance with the order."*

In accordance with this section of the Act, property owners will be given 21 days to respond to the notice of proposed order. In this response owners should include details of the efforts they have made to comply with requirements and circumstances that are preventing compliance. Council will consider the response prior to issuing the Order.

9.8.2 Consequences of an Order

An Order under Section 124 of the Act requires property owners to undertake specified works within a specified timeframe. Failure to comply with an Order is an offence under Section 628 of the Act. Penalty Infringement Notices for failure to comply with an Order will be issued.

9.8.3 Emergency Orders

Where an OSSM system is posing a significant immediate risk to public health and the environment, Council can issue an Emergency Order under Section 124 of the *Local Government Act* to undertake specified works within a specified timeframe.

9.9 Evaluation, Continuing Improvement and Review of the System

Council will maintain an on-going evaluation of the OSSM Program and Policy. Results of the assessment, monitoring and evaluation may be included in Council's State of the Environment Report.

QPRC makes a commitment to the continuing improvement in the regulation and operation of on-site sewage management systems. Council undertakes to regularly review this Policy to ensure that it reflects the needs and concerns of Council's residents as well as meeting the changes to the legislation and standards.

This Policy and all relevant information regarding On-Site sewage management will be made available on the QPRC website and at Council offices.

9.10 Performance Indicators

The following indicator is to serve as a measure of the effectiveness of the policy and any supporting procedures and will be built into Management Plan reporting processes.

- No. of inspections undertaken p.a.

10 Decommissioning an OSSM

Septic tanks contain untreated wastewater which if abandoned and incorrectly decommissioned, can leak contaminants into the soil and groundwater. This can include bacteria, viruses, parasites and nitrates which can cause diseases or other health or environmental problems. This has the potential to contaminate the soil and groundwater and pollute local watercourses.

Septic tanks that have not been correctly decommissioned may also pose a safety hazard. There have been serious injuries and even deaths caused by a fall into an abandoned septic tank when the lid collapsed.

A septic tank may need to be decommissioned under the following circumstances:

- If the tank is irreparable and requires replacement
- If Council requires the Septic to be decommissioned
- There may be other reasons triggered by development application assessment or change of land use.

If a septic tank is to be decommissioned, the property owner is required to notify Council in writing including the proposed date and the reason why the tank is being decommissioned. This must then be carried out adhering to the following Advisory Note: NSW Health Advisory Note 3 – May 2006: Destruction, Removal or Reuse Of Septic Tanks, Collection Wells, Aerated Wastewater Treatment Systems and other Sewage Management Facility Vessels
http://www.health.nsw.gov.au/environment/domesticwastewater/Documents/adnote3.pdf

11 REFERENCES

- Designing and Installing On-Site Wastewater Systems: A Sydney Catchment Authority Current Recommended Practice (2014). This publication can be found on the Water NSW website: www.sca.nsw.gov.au/publications/publications/designing-and-installing-on-site-wastewater-systems
- AS/NZS 1547 and the 'Environment & Health Protection Guidelines: On-site Sewage Management for Single Households' (the 'Silver Book', Department of Local Government,1998) which are both current recommended practice for on-site wastewater management.

11.1 Supporting Documents

- On-site Sewage Management Inspection Report
- OSSM Risk Assessment Matrix
- OSSM Procedure Flowchart

12 DEFINITIONS

Absorption: uptake of liquid into soil or other media.

Aerated wastewater treatment system (AWTS): a wastewater treatment process typically involving:

- Settling of solids and flotation of scum;
- Oxidation and consumption of organic matter through aeration;
- Clarification - secondary settling of solids; and
- Disinfection of wastewater before surface irrigation.

Aerobic: dissolved or free oxygen is present.

Anaerobic: dissolved or free oxygen is not present.

Anaerobic digestion: decomposition of sludge in the absence of free oxygen.

Best management practice: those approaches that have been developed to prevent or minimise water pollution at source, or as close to the source as practicable. They include those practices determined to be the most effective and practicable ways of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

Blackwater is defined as wastewater from a kitchen, toilet, urinal or bidet.

Desludging: withdrawing sludge, scum and liquid from a tank.

Disinfection: a process that destroys, inactivates or removes pathogenic microorganisms.

Domestic wastewater: wastewater arising from household activities, including wastewater from bathrooms, kitchens and laundries.

Effluent: The liquid discharged from a waste water treatment unit.

Evapotranspiration: removing water from soil by evaporation and from plants by transpiration.

Greywater: Waste water from baths, showers, basins, laundries and kitchens, specifically *excluding* water closets and urinal wastes. Greywater does not normally contain human waste unless laundry tubs or basins are used to rinse soiled clothing or babies nappies.

Groundwater: all underground waters.

Human waste treatment device (HWTD): device for treating human excreta and other wastewater, including a septic tank, aerated wastewater treatment system, septic closet, water closet, humus closet and combustion closet (from the *Local Government Act 1993*).

Land application area: the area over which treated wastewater/effluent is applied.

Land application system: system that can consist of pumps, pipes, nozzles, or trenches designed to apply wastewater evenly over a land application area. Includes both irrigation systems and soil absorption systems.

Local authority: examples are:

- License regulators in metropolitan areas;
- Local councils in country NSW;
- Water boards established for specific locations.

Nutrients: chemical elements that are essential for sustained plant or animal growth; the major nutrients essential for plant growth are nitrogen, phosphorus and potassium. In excess, nitrogen and phosphorus are potentially serious pollutants encouraging nuisance growths of algae and aquatic plants in waters and (in the case of nitrate) posing a direct risk to human health.

On-site sewage is defined as both greywater and blackwater.

On-site sewage management systems (OSSMs)

The following wastewater treatment systems are all classed as on-site sewage management systems:

- Septic tank and absorption trenches;
- Septic tank and evapotranspiration areas;
- Aerated wastewater treatment systems (AWTS);
- Septic tank to pumpout;
- Dry composting toilets and greywater treatment systems;
- Wet composting toilets and subsurface application systems;
- Septic tank and constructed wetlands;
- Septic tank and soil mound systems; and
- Packaged Treatment Water Systems.

Reticulated water supply: the provision by a water authority of water for potable and non-potable uses to households through a network of pipes

Scum: material that collects at the top of primary wastewater treatment tanks, including oils, grease, soaps and plastics

Septic tank: wastewater treatment device that provides a preliminary form of treatment for wastewater, comprising sedimentation of settle-able solids, flotation of oils and fats, and anaerobic digestion of sludge

Sewage: waste matter that passes through sewers. Sewage includes any effluent of a kind referred to in paragraph (a) of the definition of waste in the *Local Government Act 1993*.

Sewage management: any activity carried out for the purpose of holding or processing, or reusing or otherwise disposing of, sewage or by-products of sewage.

Sludge: mainly organic semi-solid product produced by wastewater treatment processes

Soil absorption system: (includes leach drains, drain fields, absorption trenches, seepage beds and seepage pits) subsurface land application systems that rely on the capacity of the soil to accept and transmit the applied hydraulic load

Suitably qualified geotech consultant: A suitably qualified person must have qualifications and experience relevant to the work being undertaken and must be a current member of a relevant professional organisation. Some ways to engage a suitably qualified person are:

- Conduct a search for Geotechnical Report in the Yellow Pages or “Google” using the search term ‘geotechnical consultant’ or “Site and Soil scientist”
- Approach professional associations such as:

- Australasian Land and Groundwater Association
- Soil Science Australia

- Recommendations from people who have engaged a suitably qualified person to conduct similar, successful works in the past.

Suitably qualified servicing agent: A suitably qualified service provider must:

- have completed a course on servicing and maintenance of system; and have some supervised servicing experience, or extensive un-supervised experience.
- Not perform electrical work or enter confined spaces unless qualified to do so;
- Be either employed or authorised by the manufacturer;
- Must service the system in accordance with the manufacturers service requirements specified in it's service manual.

Treated wastewater: Means effluent or wastewater that has received treatment via a human waste treatment device

Waterless composting toilet: (humus closet, biological toilet) waterless system that uses the principle of composting to break down human excreta to a humus-type material. The liquid fraction is evaporated or directed to an appropriate management system

Wet composting toilet: treats all household wastewater and putrescible household organic solid wastes such as food waste. Uses the principle of aerobic composting to break down the solid waste; the liquid component is directed to a land application system after passing through the pile of solids.

OSSM No: Property Number: Owners correct: Other: Property Address:	**OSSM RISK ASSESSMENT MATRIX** THIS FORM IS FOR COUNCIL USE ONLY	Result of inspection:

RISK ASSESSMENT FACTORS	*LEVEL OF RISK*						NOTES
	HIGH		MEDIUM		LOW		
Area of land	Res Area	15	2 ha or Less	5	> 2 ha	0	
Distance from nearest body of water	< 40m Dam/DD < 150m River	20	40-100m Dam/DD 150-200m River	10	> 100m Dam/DD > 200m River	0	
Soil type	Sand	15	Heavy Clay/Rock	10	Clay/Clay Loam	0	
Distance to downhill boundaries	< 6m	10	6-10m	5	> 10m	0	
Number of bedrooms in residence/occupants of premises	> 4 Bedrooms	10	3 – 4 Bedrooms	5	< 3 Bedrooms	0	
Landfall/slope	Steep	25	Undulating	10	Flat – Gently Rolling	0	
Level of groundwater/nearest bore	< 1m	15	1 – 2m	5	> 2m	0	
Arrangements for stormwater diversion	None with High incidence	15	None with low incidence	10	Installed	0	
Proximity to human activity	< 6m	15	6 – 10m	10	> 10m	0	
Type of system appropriate for site		15		10		0	
Other site specific factors:							
A score of more than 50 = High Risk							
A score of less than 50 = Medium Risk							
A score of 0 = Low Risk							
OVERALL RISK ASSESSMENT							

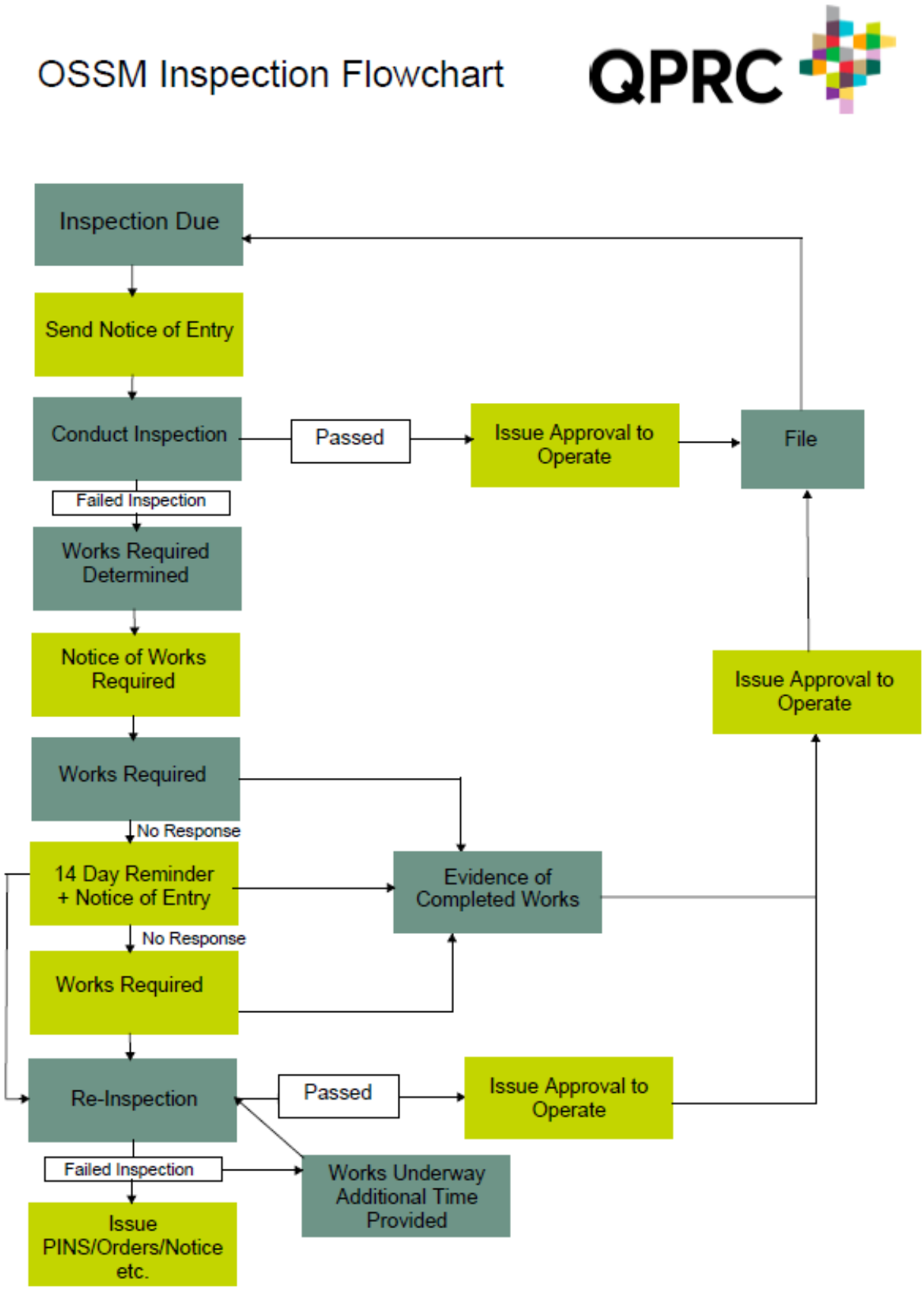
This matrix was completed by:

Name:……Signature:……Date:…/…/……

*Advice Sent to Householder Date:*_____

*Entered on Dbase:*_____

Appendix 2 – Inspection Flow Chart



POLICY:-	
Policy No:	
Policy Title:	
Date Policy was adopted by Council:	8 August 2018
Resolution Number:	
Previous Policy Review Date:	
Next Policy Review Date:	August 2023
PROCEDURES/GUIDELINES:-	
Date Procedure/Guideline (if any) was developed:	August 2018
RECORDS:-	
Container Reference in TRIM: Policy	SF070576 / C1890671
Container Reference in TRIM: Procedure	
Other locations of Policy:	Intranet (linked to TRIM Container)
Other locations of Procedures/Guidelines:	Intranet (linked to TRIM Container)
DELEGATION (if any):-	
RESPONSIBILITY:-	
Draft Policy developed by:	Manager Natural Landscapes & Health
Committees (if any) consulted in the development of the Draft Policy:	
Responsibility for Implementation:	Manager Natural Landscapes & Health
Responsibility for Review of Policy:	Program Coordinator Environmental Health

INTEGRATED PLANNING FRAMEWORK:	
Community Strategic Plan:	Theme No.
Delivery Program Title:	Character
Operational Plan:	24.4 – Environmental Health

Senior Authorising Officer	**Position** Portfolio General Manager	**Signature/Date**  16 October 2018

ACTION	COUNCIL MEETING DATE	RESOLUTION NUMBER	REPORT ITEM NUMBER
NEW/RECONFIRMED/ AMENDED			
New	8/8/18	PLA093/18	9

DATE REVIEWED	REVIEWER POSITION	REVIEWER NAME