BATHURST
REGIONAL
COUNCIL

On-Site Sewage Management Strategy 2019

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1. TITLE

The title of this Strategy is: - “Bathurst Regional Council – On-site Sewage Management Strategy.”

2. BACKGROUND

In March 1998 the NSW Minister for Local Government introduced The Local Government (Approvals) Amendment (Sewage Management) Regulation 1998 and the Environment and Health Protection Guidelines. The Regulations and Guidelines were in response to studies conducted in NSW which indicated both a failure rate of up to 70% of on-site sewage management systems, and an enormous potential for unsatisfactory cumulative impacts on the environment and on public health arising from the previous ad-hoc management strategies/methods. The Regulation has since undergone review and the relevant legislation is now contained within the Local Government (General) Regulation 2005.

Both Bathurst Regional Council (Council) and landholders have responsibilities in relation to the installation and operation of on-site sewage management systems to ensure protection of public health and the environment.

It is estimated that there are more than 2800 on-site sewage management systems in operation in the Bathurst LGA. All on-site sewage management systems should be registered with Council and have a current approval. However it is recognised that historically the management of such systems has not been a high priority for Council and that there have been insufficient staff resources to effectively manage these systems in a strategic manner.

3. APPLICATION OF THIS STRATEGY

This Strategy applies to:

- all land within the Bathurst Local Government Area (LGA) **not** provided with reticulated sewerage infrastructure;
- all existing and proposed installations of on-site sewage management systems on residential premises;
- all Development Applications for new or amended/altered works on land not provided with reticulated sewerage infrastructure;

This strategy is principally aimed at outlining the relevant guidelines for single residential premises. Dual occupancies may be subject to conditions differing from those detailed in this strategy and will be assessed on a case by case basis. It is acknowledged that commercial and industrial premises require a different approach to residential installations, and therefore will be addressed on a case by case basis.

4. OBJECTIVES

The objectives of this Strategy are to ensure that on-site sewage management systems in the Bathurst Local Government Area are installed and operated in a manner that ensures the following:

(a) prevention of risks to public health;

(b) protection of surface and groundwater from pollution;
(c) protection of soils and surrounding environment from pollution and degradation;
(d) protection of community amenity by not producing odours or attracting vectors of disease.

Further this strategy aims to:

(a) set the minimum standards for the design, installation and maintenance of on-site sewage management system;
(b) outline the processes related to monitoring and inspection of on-site sewage management systems in the Bathurst LGA.

5. RELATIONSHIP TO OTHER DOCUMENTS

In the event that the relevant Legislation, Guidelines or Australian Standards are revised post the adoption of this Strategy, the revised documents are to replace the repealed documents specified in this Strategy.

The following sections outline the legislative framework for the approval and monitoring of on-site sewage management systems in NSW.

5.1 The Local Government Act 1993

The Local Government (General) Regulation 2005 (under section 68 of The Local Government Act 1993 - Approvals):

(a) specifies requirements for the design, installation, alteration and operation of domestic on-site sewage management systems, under s. 68 and s.68A of the Act, and allows fees to be charged under s. 608;
(b) specifies information required to accompany an application to operate, install or alter an on-site sewage management system;
(c) clarifies accreditation roles and responsibilities of NSW Health;
(d) describes minimum performance criteria for the installation and operation of on-site sewage management systems;
(e) prescribes where public health or the environment are at risk an Order under Section 124 of the Act may be issued depending on the situation, including Orders - 21, 22, 24, 25, 30 or an Emergency Order (which may be issued where public health or the environment is at risk);
(f) provides that following the expiration of an Order, a Penalty Infringement Notice (PIN) under the Act may be issued depending on circumstances;

5.2 Protection Of The Environment Operations Act 1997 (POEO Act)

The Act provides local government with powers to investigate and issue notices. Councils are the Appropriate Regulatory Authority (ARA) for activities relating to on-site sewage management facilities (excluding Scheduled Premises). Where an on-site sewage management facility is detected to be failing the following actions are available to Council under the POEO Act:

(a) Clean Up Notices - are quick responses to pollution incidents. These notices incur an administration fee (fees are listed in Council's Revenue Policy);
(b) Prevention Notices - can be issued where an on-site sewage management facility is operating in an environmentally unsatisfactory manner. These notices incur an administration fee (fees are listed in Council's Revenue Policy);

(c) PIN under the Act may be issued.

Any enforcement action undertaken by Council will be guided by the procedures outlined in Council's Enforcement Policy. At all times Council aims to work with landholders to ensure the safe and efficient management of on-site sewage management systems. However some circumstances may require Council to utilise powers under the LG Act or POEO Act.

5.3 The Environment and Health Protection Guidelines for On-site Sewage Management for Single Households

These Guidelines, which are called up in the regulations and dually empowered by the application of the regulations recommend that Councils should:

(a) develop, implement and regularly review a Sewage Management Strategy;
(b) consider all issues relating to approving the installation and operation of on-site sewage management facilities, particularly environment and health issues;
(c) develop conditions of Approval to Operate for systems of on-site sewage management and specific sites;
(d) undertake ongoing community education programs; and
(e) implement a long-term program of inspections to monitor the performance and impact of on-site sewage management facilities on the wider environment.

5.4 National Construction Code and Australian/New Zealand Standards

The following must be adhered to in the application of this policy:

NCC VOLUME 3 (PLUMBING CODE OF AUSTRALIA) INCORPORATING AS/NZS 3500.2:2008 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.

AS/NZS 1547:2012 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 ON-SITE DOMESTIC WASTEWATER TREATMENT UNITS

AS/NZS 1546.1:2008 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.

AS/NZS 1546.2:2008 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.

AS/NZS 1546.3:2009 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.

5.5 Council Policies

This strategy must be read with reference to the following Council policies:

- Greywater Reuse Policy
- Trade Waste Policy
- Enforcement Policy
- Revenue Policy

6. TYPES OF ON-SITE SEWAGE MANAGEMENT SYSTEMS

The on-site sewage management system utilised on a premises may include one or more of the following elements:

- Septic tank and absorption trenches
- Septic tank and evapo-transpiration areas
- Aerated wastewater treatment systems (AWTS)
- Septic tank and collection well (pump-out system)
- Dry composting toilets
- Wet composting toilets and subsurface application systems
- Septic tank and constructed wetlands
- Septic tank and soil mound systems
- or any other system designed to treat and dispose of sewage

Greywater treatment and re-use systems are defined as a system of sewage management by the LG Act. These systems must comply with Council's Greywater Reuse Policy and are not discussed further in this strategy. Pump-out systems are not considered to be a viable on-site waste management technique and as such will be considered as the last option and generally on existing sites where existing site constraints or environmental or health risks preclude other options.

Clause 41 (1) of the Local Government (General) Regulation 2005 requires that Council will not approve the installation or construction of a sewage management facility unless the Council is satisfied that the facility is to be installed or constructed to a design or plan that is the subject of a certificate of accreditation from the NSW Health, being a certificate that is in force www.health.nsw.gov.au/environment/domesticwastewater

The most suitable system for a particular site will be dependent on a wide range of criteria which are outlined in subsequent sections of this strategy.

7. APPROVAL PROCESS FOR THE INSTALLATION, CONSTRUCTION OR ALTERATION OF AN ON-SITE SEWAGE MANAGEMENT SYSTEM

Prior to the installation, construction or alteration of an on-site sewage management system (or an addition to an on-site sewage management system), the landowner must make an application to Council. An application shall be made on the prescribed form, and accompanied by any associated fees as prescribed in Council's Revenue Policy. The application must be accompanied by the following:

7.1 Site Layout Plan

The application must be accompanied by a plan (drawn to scale with accurate dimensions), showing:

(a) the location of the on-site sewage management system proposed to be installed or constructed on the premises including accurate measurements to all buildings and structures, boundaries, natural features including dams, waterways, creeks, drainage depressions (located both within and external to the property, within the range of the required buffer distances), and native vegetation; and
(b) the precise location of any related effluent application areas and its relationship to all of those features listed above; and
(c) a plan detailing how even distribution of wastewater is to be achieved within the disposal area(s); and
(d) any buildings or facilities existing on, any land located within 100 metres of the on-site sewage management system or effluent application areas; and
(e) location of any proposed structures that will impact on the performance of the irrigation or disposal system e.g. swimming pools, tennis courts, large sheds; and
(f) the location of any environmentally sensitive areas of any land located within 100 metres of the sewage management system or effluent application areas; and
(g) any related drainage lines or pipework (whether natural or constructed);and
(h) slope of the site (or contours at 0.5m (RL) intervals across the site where requested by Council); and
(i) all related buffer distances.

7.2 Specifications

The application must be accompanied by a copy of the full NSW Health accredited specifications of the on-site sewage management system proposed to be installed or constructed on the premises together with specifications of the proposed effluent application system(s).

7.3 Wastewater/Geotechnical Report

A geotechnical report is to be submitted with the "Application to Install a System of Sewage Management" to determine the suitability of the site with respect to the on-site disposal of effluent.

(a) This study is to be carried out by an experienced geotechnical engineering consultant, with associated testing being conducted by a NATA registered laboratory. Matters such as geology, stratigraphy (in particular soil profile and permeability) must be addressed.

(b) The report must also state whether or not the proposed dwelling and the proposed effluent disposal area are located in a position and are of a design and capacity to ensure that all effluent arising from the dwelling can be disposed of on the site without causing nuisances and/or pollution, both in the short and the long term.
(c) The report must reference compliance with AS/NZS 1547:2012 and the Environment and Health Protection Guidelines – On-site sewage management for single households
(d) The final location of the dwelling on the land may be determined by the findings and recommendations of the required geotechnical report. The location of the dwelling should therefore not be finalised until the results of the geotechnical report is known.

A geotechnical report is not required to be submitted with an application to alter a system of sewage management where an increased load is proposed but no subsequent augmentation to the effluent disposal area. However advice from a geotechnical engineer in the form of a letter is required in this situation to recommend no additional effluent disposal is required or if augmentation is required detailing the design.

8. PERFORMANCE CRITERIA

The Council must consider performance criteria when determining applications for Approval to Install, construct, alter or operate on-site sewage management facilities. The Local Government (General) Regulation 2005 {Cl.44(1)} specifies minimum objectives, which are listed below:

(a) the prevention of the spread of disease by micro-organisms;
(b) the prevention of the spread of foul odours;
(c) the prevention of the contamination of water;
(d) the prevention of the degradation of soil and vegetation;
(e) the discouragement of insects and vermin;
(f) ensuring that persons do not come into contact with untreated sewage or effluent in the ordinary activities on the premises concerned;
(g) the minimisation of adverse impacts on the amenity of the premises and surrounding lands; and
(h) if appropriate, provision for the reuse of resources including nutrients, organic matter and water.

8.1 Climatic conditions

All applications should consider the average climatic conditions for the Bathurst LGA as reported by the Bureau of Meteorology.

9. ASSESSMENT PROCESS

It is the responsibility of the applicant to ensure that all required information is supplied to Council with the completed application form. Council staff are available provide assistance and advice in ensuring that the application is complete prior to submission.

The application will be assessed and the applicant will be notified in writing of the determination. That is, the application has been:

(a) **Approved** subject to conditions of consent and amendments where required, or
(b) **Refused** with an explanation if it is established that the proposal would not provide a satisfactory level of human health protection and environmental well-being.

An applicant or their contractor must not commence work on the installation of a system of on-site sewage management without **prior written Approval** from Council.

10. OPERATION AND MAINTENANCE OF AN ON-SITE SEWAGE MANAGEMENT SYSTEM

At the completion of an installation, construction or alteration of an on-site sewage management system, the system is not permitted to be operated until such time as Council has issued an Approval to Operate a Sewage Management System. This will only be issued once the system has been installed, constructed or altered in accordance with the approval as issued by the Council.

If Council finds that a condition of the Approval to Operate has not been complied with, Council may modify or revoke the approval, or require remedial works to be undertaken to ensure compliance.

10.1 Responsibility of the Owner or Occupier

It is the responsibility of the homeowner / occupier to ensure that the on-site sewage management system on their property is maintained and operated in a manner which does not pose any risk to public health and or the environment. The owner and or occupier should be aware of the operation and maintenance requirements for their system and must ensure that the necessary service contracts are in place. The owner or occupier should notify Council if their on-site sewage management system is failing and prior to arranging the necessary repairs or replacement of the system in compliance with Council requirements. Written approval must be obtained from Council prior to commencing any modifications or alterations to the system.

10.2 Maintenance of Septic Tanks

Septic tanks shall be desludged as required by an authorised human waste removal service, and disposed of at an approved facility. Desludging is required when:

(a) the scum layer is within 100mm of the bottom of the inlet square junction, or the sludge layer is within 200mm of the bottom of the outlet square junction;
(b) the sludge occupies the basic allowance (1550L) of the septic tank; or
(c) the total depth of sludge and scum is equal to one third of the depth of the tank.

The desludging procedure should ensure:

1. That sufficient water is introduced in to the tank after desludging to prevent the tank from being lifted by soil hydrostatic pressure.

2. Caution shall be taken during the desludging process to protect the facility the collapse or displacement of internal compartments or components.

10.3 AWTS Maintenance and Service Technicians

All AWTS's require servicing and maintenance at 3-monthly intervals (or at intervals as specified in the NSW Health accreditation for the system).

(a) Therefore:

(i) the owner must enter into an annual service contract with a suitably qualified and experienced service contractor;
(ii) the service contractor is required to check or test all of the mechanical, electrical and functioning parts of the AWTS in accordance with NSW Health Certificate of Accreditation for the specific system.

(b) At the completion of a service a report sheet should be completed and a copy must be provided to Council after each service.

10.4 General Maintenance Considerations

When an on-site sewage management facility is:

(a) due to be serviced;
(b) in need of repair;
(c) requiring replacement;
(d) to be installed;
(e) to be altered, modified or attended to in terms of operational adjustment;

All works may only be carried out by a person who is a qualified service technician or licensed tradesperson where required. Written approval must be obtained from Council prior to commencing any alterations or modifications to the system. Any replacement work must comply with the manufactures specifications and the NSW Health Accreditation for the system.

10.5 Maintenance of disposal area

It is the responsibility of the owner or occupier to ensure that the disposal area is maintained in accordance with the relevant 'Approval to operate a system of sewerage management'.

11. MONITORING AND INSPECTION REGIME

In order to ensure that existing systems meet the performance objectives of this strategy Council must develop a long term monitoring and inspection regime for the entire LGA.

11.1 Risk rating

All on-site sewage management systems in the Bathurst LGA will be assigned a risk rating. Three categories are proposed:

- High risk
- Medium risk
- Low risk

The property/system is assigned the appropriate risk if it satisfies **one** or more criteria. In the case where the property may fall within two categories the ***higher*** risk category will prevail.

All new systems will be granted an approval period of two (2) years in the first instance. Upon application for renewal of the approval to operate the relevant risk rating will be applied.

11.1.1 High risk criteria

- Area of property is less than 1.0Ha
- Less than 100m from a waterway or less than 40m from a dam
- Disposal area is less than 12m from an uphill boundary
- Disposal area is less than 6m from a downhill boundary
- Slope is greater than 20% (or 1 in 5)
- Nearest bore or well used for domestic water supply is less than 200m
- No stormwater diversion is in place
- Uses/proposes surface disposal eg AWTS
- Proposes to use composting or reed beds or constructed wetlands for disposal
- Located in the Chifley Dam catchment area
- Proximity to human activity* of disposal area is less than 6m if uphill
- Proximity to human activity of disposal area is less than 3m if downhill
- Potable water supply is reticulated town water
- Topographical position is in an overland flow path
- Property is within 1% AEP flood zone
- Property is other than a single domestic dwelling
- Surface water is present in disposal area
- Soil erosion is present in or near disposal area
- Newly installed systems

***** human activity includes recreational lawn areas, children's play areas, vegetable gardens or fruit trees.

11.1.2 Medium risk criteria

- Area of property is 1.0 to 4.0Ha
- Disposal area is between 100m and 200m from a waterway
- Disposal area is greater than 12m from an uphill boundary
- Disposal area is greater than 6m from a downhill boundary
- Slope is less than 20% (or 1 in 5) but more than 10% (1 in 10)
- Nearest bore or well used for domestic water supply is greater than 200m but less than 300m
- Stormwater is partially diverted from the disposal area and all on-site sewage management infrastructure
- Uses sub-surface disposal but no geotechnical report has been provided (for existing systems)
- Proximity to human activity of disposal area is between 6m and 20m
- Potable water supply is bore or dam water
- Topographical position is not in an overland flow path
- Property is outside 1% AEP flood zone
- Property is infrequently used (eg low load system servicing a sports facility)
- Surface water is not present in disposal area
- Soil erosion is not present in or near disposal area

11.1.3 Low Risk Systems

- Area of property is greater than 4.0Ha
- Disposal area is greater than 200m from a waterway
- Disposal area is greater than 12m from an uphill boundary
- Disposal area is greater than 6m from a downhill boundary
- Slope is less than10% (1 in 10)
- Nearest bore or well used for domestic water supply is greater than 300m

- Stormwater is fully diverted from the disposal area and all on-site sewage management infrastructure
- Uses sub-surface disposal and an approved geotechnical report has been provided (for existing and proposed systems)
- Proximity to human activity of disposal area is greater than 20m
- Potable water supply is rainwater tanks only
- Topographical position is not in an overland flow path
- Property is outside 1% AEP flood zone
- Property is a single private dwelling
- Surface water is not present in disposal area
- Soil erosion is not present in or near disposal area

11.2 Inspection and Approval Regime

Existing installations, which during the course of inspections carried out by Council, are found to be functioning in a manner that meets the performance criteria and not requiring alteration, will be given a risk classification. This classification will be made in relation to the performance of the unit, the condition of the unit, possible impacts on public health, water quality, soils, native flora and community amenity.

Council will grant an approval to operate for a period of time based on the risk rating of the system as follows:

- **High risk system – two (2) years**
- **Medium risk systems – five (5) years**
- **Low risk systems – eight (8) years**

Additional inspections may be carried out at Council's discretion. The approval will specify the performance objectives of the Regulation and provide a mechanism for accountability to the Council concerning compliance with basic requirements (conditions) aimed at the protection of public health and the environment.

A system which has met all operational and approval conditions on two (2) consecutive inspections may be granted a lower risk rating at the discretion of Council.

Upon routine reinspection or expiration of the 'Approval to Operate' the landholder will be required to make an application for renewal of their approval to operate and pay the associated fees in accordance with Council's Revenue Policy.

11.3 Failing Systems

Where an on-site sewage management system is found to be functioning in a manner which Council deems to be unsatisfactory and is a risk to either or both the environment and or public health, Council will take appropriate action under relevant legislation to ensure that the issues with the system are rectified and to ensure that the system is operating in a satisfactory manner. This action is irrespective of whether or not the system is being operated under a current Approval to Operate. If this is the case, Council holds the authority to revoke the Approval to Operate.

An 'Application to Alter a System of Sewage Management' will be required to be submitted to Council for determination should any rectification work be required.

11.4 Complaints about failing systems

A member of the community who has a problem with the operation of an on-site sewage management system is entitled to approach Council about the concern. Council will investigate complaints relating to system failures irrespective of the priority area. The inspection may replace the next scheduled inspection for any system that is the subject of a complaint. Changes may be made to the risk category of systems as a result of any investigation.

12. FEES & CHARGES

Council charges fees for both inspections and the issue of an approval to operate as detailed in its Revenue Policy. These fees cover some of the costs associated with the implementation of the program. The fees for inspections and the approval have been determined in accordance with Section 608 regulatory fees the Local Government Act 1993. Council's Revenue Policy is reviewed on an annual basis.

REVIEW OF POLICY

Council seeks feedback from the public on ways to improve the policy and make it easier to understand.

Please address your comments in writing to:

The General Manager
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Private Mail Bag 17
BATHURST NSW 2795