ON-SITE SEWAGE MANAGEMENT PLAN

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MID-WESTERN REGIONAL COUNCIL

ON-SITE SEWAGE MANAGEMENT PLAN

OUTCOME: **Communications and Governance**

MAJOR PROGRAMME: **Planning & Development**

PROGRAMME MANAGER: **Group Manager – Planning & Development**

FILE REFERENCE: **A0130040**

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2 INTRODUCTION:

2.1 Name

This Plan will be known as Mid-Western Regional Council Onsite Sewage Management Plan.

2.2 Background & Purpose

- Effective management of domestic sewage and wastewater is an important consideration for the health of Mid-Western Regional Council (MWRC) residents and the environment. It requires the active involvement of both the Council and landholders.

- Management of sewage on-site will not be seen as the simple disposal of an unwanted nuisance. Wastewater, including the nutrients and organic matter it contains, will be managed appropriately and used whenever possible.

- This Management Plan has been developed to help MWRC assess, regulate and manage the selection, design, installation, operation and maintenance of on-site sewage management systems. The Plan may also be useful to householders, developers and others who wish to reside in the MWRC area.

- This Management Plan draws upon the principles, technical data and overall advice contained in the publication "*Environment and Health Protection Guidelines – On Site Sewage Management for Single Household*s". This publication is available at MWRC office.

- This Plan outlines the framework:
  - To manage and regulate the impact of on-site sewage management systems in the MWRC Local Government Area (LGA) and to ensure community accountability;
  - To assist Council in the prioritising of resources for efficient regulation and monitoring of on-site sewage management in the area;
  - To coordinate data collection, system approval, monitoring and environmental assessment.

2.3 Aims & Objectives

The aim of this Plan is to ensure that On-Site Sewage Management Systems (OSMS) meet acceptable environmental and health performance standards. Specific objectives include:

I. **Prevention of public health risk** – sewage contains bacteria, viruses, parasites and other disease-causing organisms. Contact with effluent should be minimised or eliminated, particularly for children. Insects can also act as vectors for disease where they have access to effluent. Residuals, such as composted material, should be handled carefully. Treated sewage should not be used on edible crops that are consumed raw.

II. **Protection of surface water** – OSMS should be selected, sited, designed, constructed, operated and maintained to ensure that surface waters are not contaminated by any flow from treated systems and land application areas (including effluent, rainfall run-off and contaminated groundwater flow).

III. **Protection of groundwater** – OSMS should be selected, sited, designed, constructed, operated and maintained to ensure that groundwater will not be contaminated by any flow from either the treatment systems or land application areas.

IV. **Protection of land** – OSMS should be selected, sited, designed, constructed, operated and maintained to ensure that land is not contaminated by any flow from treated systems, effluent, rainfall run-off or contaminated groundwater flow.

V. **Conservation and reuse of resources** – the resources in domestic wastewater (including nutrients, organic matter and water) should be identified and utilised as much as possible within the bounds posed by the other performance objectives; water conservation should be practised and wastewater production should be minimised.

VI. **Protection of community amenity** – OSMS should be selected, sited, designed, constructed, operated and maintained to ensure that they do not unreasonably interfere with quality of life. Where possible, such systems should enhance the local amenity – special consideration should be given to aesthetics, odour, dust, vectors and excessive noise.

2.4 Scope

This Plan applies to all fixed OSMS in the MWRC LGA that do not directly discharge to Council's sewer mains and are not specifically regulated under a pollution control licence by the Environment Protection Authority. The systems covered by this Plan include a wide range of public, commercial and domestic sewage management facilities.

The following wastewater treatment devices are all classed as OSMS:-

- Septic tank and absorption trenches
- Septic tank and evapotranspiration areas
- Aerated wastewater treatment systems
- 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
- Any other system that stores, treats and/or disposes of sewage and wastewater on-site.

2.5 Goals

As a result of achievement of the aims and objectives of this Plan, the following goals will be achieved:

- The impacts of on-site sewage management facilities on the environment will be minimised through appropriate selection, design, sighting, construction, operation and maintenance;

- Identification of the location of all OSMS and the creation of a database of these systems that will be maintained;

- A partnership will be developed between Council, householders and service agents supporting continuing improvement of on-site sewage management;

- The owners of OSMS will be aware of the need for ongoing maintenance;

- The owners of OSMS will understand the need to obtain approvals;

- Council will recover some of the costs of implementing this policy by charging fees;

- Qualifications and accreditation processes for third parties to certify maintenance work and/or compliance with approval standards for all types of systems will be specified;

- Through consultation, local service agents will be aware of qualification and accreditation procedures;

- OSMS will be inspected upon frequency as defined within this policy.

2.6 Relevant Legislation

Legislation relevant to this Plan that Council will consider includes:

- Local Government Act 1993;
- Local Government (General) Regulation 2005;
- The Environmental Planning & Assessment Act 1979;
- Public Health Act 1991;
- Protection of the Environment Operations Act 1997;
- Environmental Penalties & Offences Act 1989;
- Accreditation of all human waste treatment devices by NSW Health;
- Environment and Health Protection Guidelines (On-site Sewage Management for Single Households) by Department of Local Government, Environment Protection Authority, NSW Health, Land and Water Conservation and the Department of Urban Affairs and Planning.

2.7 Australian Standards

Australian Standards relevant to this Plan and that Council will consider includes:

- AS/NZS 1547 – On-site Domestic Wastewater Management;
- AS3500 – Plumbing and Drainage Code as amended;
- AS1546 – On-site Domestic Wastewater Treatment Units (part 1 applies to septic tanks);
- AS1547 – Disposal Systems for Effluent from Domestic Premises;
- AS4419 – Soils for Landscaping and Garden Use;
- AS2698 – Plastic Pipes and Fittings for Rural Applications
  Part I Polyethylene, micro irrigation pipes
  Part IIPolyethylene, rural pipes
  Part III Mechanical joint fittings for use with polyethylene micro irrigation pipes;

- AS3000 – Wiring Rules – Electrical Installation – Buildings, Structures and Premises;
- AS1319 – Safety Signs for the Occupational Environment.

3 IMPLEMENTATION:

3.1 Regulatory Program

Council's regulatory programs to meet the stated goals will include the following:

a. All existing OSMS will be registered with council;
b. Applications will be obtained for all new OSMS;
c. Soil testing will be carried out prior to the installation of new systems;
d. The specification of various OSMS will be checked;
e. OSMS will be assessed as per the established criteria contained in Council's Risk Management Matrix;
f. Sites inspected as per the assessed level of risk, determined through the Risk Management Matrix:
  - ***Low Risk***, no inspection unless by request or on complaint;;
  - ***Medium risk***, inspection every 5 years unless by request or on complaint;
  - ***High risk***, inspection to occur every 2 years unless by request or on complaint;
  - ***Aerated Wastewater Treatment Systems (AWTS)***, inspection to occur according to the assessed risk determined by Council at the time of assessment. The AWTS must be inspected and serviced in accordance with the manufacturer's requirements by an approved service technician, at cost to the owner and the resultant certificate provided to Council for registration. Failure to submit the certificate will result in Council inspecting the AWTS at cost to the owner;

g. All owners/occupiers with OSMS to be advised in writing of the assessment of the site and the need for inspections;
h. Advise the NSW Government Department responsible for funding sewage schemes of the need to install a sewage scheme in a particular area or location to serve residents where this is required in the interest of public health and the environment;
i. Council will develop and maintain a database of all OSMS operating within its boundaries;
j. Levying of fees in accordance with this Plan. Fees will be identified annually in Council's Management Plan.

3.2 Risk Assessment Program

Council has adopted a system of risk assessment. The level of risk will determine the level of inspection. When assessing the level of risk the Council Officer or Accredited Service Technician will utilise the stated risk assessment criteria together with information provided by the householder on their application or registration forms, Council's planning documents, information from relevant authorities and his or her own knowledge of the area.

RISK ASSESSMENT FACTORS	*LEVEL OF RISK*		
	HIGH	**MEDIUM**	**LOW**
In an environmentally sensitive area			
Area of land			
Distance from nearest body of water			
Soil type/erosion			
Distance to property boundaries			
Number of bedrooms in residence/occupants of premises			
Landfall/slope			
Level of groundwater/nearest bore			
Arrangements for stormwater diversion			
Type of system proposed/in use			
Rainfall/flood inundation potential			
Proximity to human activity			
Other site specific factors:			
OVERALL RISK ASSESSMENT			

Each of the criteria is considered individually and a risk level determined for each site. Council may choose to include additional criteria to reflect specific issues relevant to a particular area. The Council Officer responsible may also choose to determine "weightings" for each criteria to assist in the decision making process.

Once the assessment has been undertaken and the weighting determined (which may vary from site to site) then the assessor determines the overall risk level of the site.

The risk assessment determines the frequency of inspection as outlined above in *2.1 Regulatory Program* point *f.*

Council will determine a suitable schedule of review of the risk assessments to ensure the protection of the environment.

3.3 Emergency Response Program

Response procedures by the Council in the case of emergencies shall be:

- Inspection of site within 48 hours;
- Contact the owner/occupier of the property affected by the emergency;
- Issue a Council Order if necessary.

3.4 Existing Systems

The owners of OSMS that previously notified Council of the presence of their systems have been registered to operate those systems. Approval to operate those systems will be dependant upon the system continuing to operate in a

manner that does not produce environmental or health risk to the site occupants or the wider environment.

Where appropriate, Council may require an application for renewal of an approval to be submitted. Applications for renewal of an approval to continue to operate an OSMS are to be accompanied by a certificate of inspection issued by Council or a service technician/certifier accredited under this policy. To ensure a consistency of approach, all inspections will utilise the appropriate inspection checklist that is available from Council.

3.5 New Systems

All new systems or altered systems are required to be certified as compliant with the necessary standards by the issue of a Compliance Certificate.

At completion of installation or alteration of a system, a Compliance Certificate is to be issued prior to commencement of use.

3.6 Application for Approval

An application for approval to install, construct or operate an OSMS will be accompanied by:

- A plan drawn to scale and showing location of:
  - The OSMS proposed to be installed or existing on the premises and any related effluent application areas, and;
  - Any existing or proposed buildings or facilities on the site including any environmentally sensitive areas located within the parameters set out in the table below unless otherwise determined by Council:

System	Recommended Buffer Distances
All land application systems	• 80m to permanent surface waters (eg river, streams, lakes, etc) • 50m to domestic groundwater well on applicant's property and 200m to any groundwater well located on a neighbouring property • 40m to other waters (eg farm dams, intermittent waterways and drainage channels, etc)
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 & walkways • 6m to swimming pools
Surface drip & 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 systems	• 12m if area up-gradient and 6m if area down-gradient of property boundary • 6m if are up-gradient and 3m if area down-gradient of swimming pools, driveways and buildings
Absorption Systems Designs	• Trench lengths may vary depending on the number of bedrooms. However, the width will be 2m and the depth 400mm unless otherwise determined by the Council

- Where buffer distances set by this table can not be achieved and are considered to be impracticable, unwarranted or unjustified, given the circumstances of the case, a lesser buffer distance acceptable to the Council may be applied.

- Specifications of the OSMS proposed to be installed or constructed on the premises concerned. Specifications to include details of pump sizes, air pump capacities, tank capacities and cross sectional details;

- Depending on the site parameters, a geotechnical site assessment detailing the topography, soil composition and vegetation of any effluent application areas related to a proposed OSMS may be required. The report is to provide information indicating that the proposed system is capable of providing long term effluent disposal.

  The report is to be prepared by a suitably qualified geotechnical specialist or other person approved by council and be certified as complying with the requirements of the Environmental & Health Protection Guidelines (On-site Sewage Management for Single Households) and Australian/New Zealand Standard 1547 – On-site Domestic Wastewater Management;

- A statement by the owner or applicant indicating:
  - The number of or probable number of persons residing in the premises;
  - The number of rooms capable of being used as a bedroom, and;
  - Other factors as may be relevant to the capacity of the proposed OSMS or site conditions that may influence the operation of the facility.

  Operation and maintenance details are required to identify:
  - The operation and maintenance requirements for the OSMS;
  - The proposed operation, maintenance and servicing arrangements intended to meet those requirements, and;
  - The action to be taken in the event of a breakdown in, or other interference with system operation.

  A submission for approval is required to consist of no less than three (3) copies of the information.

3.7 System Performance

An installation that is failing to operate in accordance with the aims and objectives of this Plan may be re-categorised as a high risk installation.

Council may issue an order under the provisions of clause 124 of the Local Government Act 1993 to require a system to be altered to restore performance to the acceptable standard.

3.8 Risk Category Review

When an installation has been categorised by Council, and the owner believes that the category is inappropriate, an application for review may be submitted. The application is required to include sufficient information to allow a review of the classification and be accompanied by the appropriate fee.

3.9 Risk Re-categorisation

To encourage appropriate management and maintenance of OSMS, Council may reclassify the risk category. Council will notify property owners where it is considered that a re-categorisation is proposed.

Re-categorisation of installations may be as follows:

High to medium risk – where over a period of three years of continuous licensed operation, a particular installation has been shown to be operating in accordance with this plan;

Medium to low risk – where over a period of five years of continuous licensed operation, a particular installation has been shown to be operating in accordance with this plan;

Properties that change ownership will have the system returned to its original categorisation and the requirement to obtain an approval to operate the system.

3.10 System Inspections

Where system re-registration is required, the system will be inspected by Council or by a person who is registered with MWRC as an accredited person.

The licenced owner or operator of a system may be authorised to certify that the system is operating in accordance with this Plan if granted an approval by Council.

Prior to entering a property to inspect a system, written notice must be given to the owner or occupier of the property unless entry is made with the consent of the owner or occupier. In all cases entry must only be made in accordance with the relevant provisions of the Local Government Act 1993, as amended.

An accredited certifier or service person is required to certify that an aerated waste treatment system is operating in accordance with the standards.

Council proposes to monitor the application of this Plan by conducting inspections of approximately 3% of all installations annually.

3.11 Fees

Council may impose fees for applications for approval to install or operate OSMS, the implementation of inspections of any premises, facilities or maintenance of records. The approved fee(s) will be listed in Council's Management Plan.

4 ADMINISTRATION:

4.1 Records

Council will register all applications and details of the determination in a register. It will include details of applicants, property descriptions, types of OSMS, date of applications, any site inspections, determinations of applications

and date of issue of any approvals or refusals and any other relevant details. The register may be kept in electronic format.

4.2 Renewal Notifications

Notification will be sent at least two months prior to the expiry date of the current approval. The notification will include an application from for renewal and details of the information required to be submitted with the application.

4.3 Accredited Certifiers AWTS

The minimum requirement necessary before a person may be considered for accreditation by MWRC to service and maintain an AWTS is:

- Have completed an appropriate course of instruction with an accredited college or similar body in the maintenance and operation of AWTS;

- Have demonstrated knowledge in the area of:
  - System design and treatment processes;
  - Operation and maintenance requirements
  - Performance standards for environment and health protection
  - Regulatory requirements and obligations
  - Consumer's rights
  - Occupational health & safety requirements
  - Environment protection responsibilities.

4.4 Accredited Service Technicians Non AWTS

The minimum requirements necessary before a person may be considered for accreditation by MWRC to service and maintain septic tanks, irrigation fields, absorption fields and trenching and the like are:

- Tradesman qualification as a plumber and drainer;

- Have demonstrated knowledge in the area of:
  - System design and treatment processes
  - Operation and maintenance requirements
  - Performance standards for environment and health protection
  - Regulatory requirements and obligations
  - Consumer's rights
  - Occupational health & safety requirements
  - Environment protection responsibilities.

4.5 Licenced Owner/Operator Certification

The minimum requirements necessary for a person who is a licenced owner/operator of a system to be able to self certify a system is:

- Completion of an approved management or maintenance course, or;

- Registration with Council as competent to manage/maintain a system.

4.6 Policy Review

This policy will be reviewed every four years within the twelve month period after each general Council election or more often as necessary.

5 INFORMATION SOURCES:

Environment & Health Protection Guidelines "On-site Sewage Management for Single Households"

- Issued by Department of Local Government, Environment Protection Authority, NSW Health, NSW Department of Land & Water Conservation and the Department of Urban Affairs and Planning.

On-site Sewage Management Policy

- Bourke Shire Council

On-site Sewage Management Plan

- Blayney Shire Council