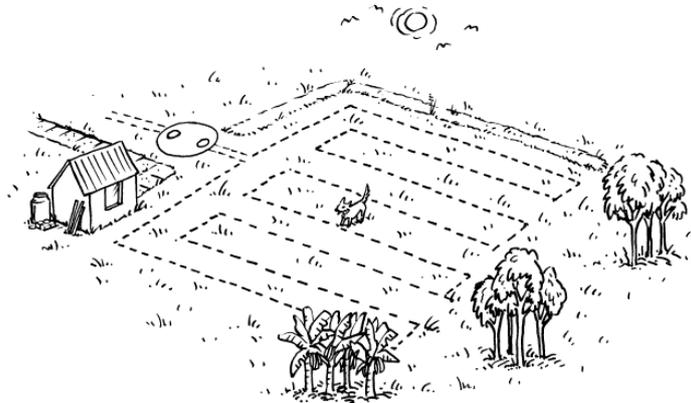




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# ON-SITE SEWAGE MANAGEMENT STRATEGY 2015 – 2018

PROTECTING PUBLIC HEALTH  
AND THE ENVIRONMENT



*REF: WO/14/977*

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# ON-SITE SEWAGE MANAGEMENT STRATEGY

## CONTENTS

<b>1. INTRODUCTION</b> .....	<b>5</b>
1.1.PURPOSE	5
1.2.SCOPE	5
1.3.OBJECTIVES	6
1.4.GOALS	7
<b>2. LEGISLATION AND GUIDELINES</b> .....	<b>9</b>
2.1.LOCAL GOVERNMENT ACT 1993	9
2.2.LOCAL GOVERNMENT (GENERAL) REGULATION 2005	10
2.3.PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997	10
2.4.ENVIRONMENT AND HEALTH PROTECTION GUIDELINES	10
2.5.NSW DEPARTMENT OF HEALTH ACCREDITATION	11
2.6.AUSTRALIAN STANDARDS	11
<b>3. RESPONSIBILITIES</b> .....	<b>12</b>
3.1.COUNCIL RESPONSIBILITIES	12
3.2.OWNER RESPONSIBILITIES	13
<b>4. INFORMATION</b> .....	<b>14</b>
4.1.ON-SITE SEWAGE MANAGEMENT SYSTEMS REGISTER	14
<b>5. REGISTRATION AND APPROVAL</b> .....	<b>15</b>
5.1.EXISTING SYSTEMS	15
5.2.NEW SYSTEMS	15
5.3.RENEWAL OF COUNCIL APPROVAL	15
5.4.TRANSFER OF OWNERSHIP	16

<b>6. MONITORING PROGRAM .....</b>	<b>17</b>
6.1.RISK ASSESSMENT AND CLASSIFICATION	17
6.2.PRELIMINARY CLASSIFICATION	17
6.3.ON-SITE INSPECTION	17
6.4.INSPECTION FREQUENCY	18
6.5.RE-CLASSIFICATION	19
6.6.AERATED WASTEWATER TREATMENT SYSTEMS (AWTS)	19
6.7.FINANCIAL HARDSHIP AND UPGRADING FAILING SYSTEMS	19
<b>7. RESOURCES .....</b>	<b>20</b>
7.1.FEES	20
<b>8. GLOSSARY .....</b>	<b>21</b>
<b>9. APPENDIX.....</b>	<b>23</b>
9.1.RISK ASSESSMENT CRITERIA	23
9.2.SITE ASSESSMENT CHECKLIST	24
9.3.ON-SITE SEWAGE MANAGEMENT SYSTEM STANDARD CONDITIONS OF APPROVAL	26
9.4.SYSTEM OPERATION	31

## 1. INTRODUCTION

Effective management of domestic sewage and wastewater is an important consideration for the health of Walcha Local Government Area (LGA) 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 Strategy has been developed to help Walcha Council assess, regulate and manage the selection, design, installation, operation and maintenance of on-site sewage management systems. The Strategy may also be useful to householders, developers and others who wish to reside in the Walcha Council area.

This Management Strategy draws upon the principles, technical data and overall advice contained in the NSW Department of Local Government publication *“Environment and Health Protection Guidelines - On Site Sewage Management for Single Households”*.

### 1.1. PURPOSE

The purpose of the On-site Sewage Management Strategy is to:

- 1.1.1. Guide landholders towards sustainable on-site management of domestic sewage and waste water.
- 1.1.2. Protect and enhance the quality of public health and the environment in the long term within the Walcha Council area.
- 1.1.3. To assist Council to prioritise resources for the efficient regulation and monitoring of on-site sewage management systems within its area.

### 1.2. SCOPE

The On-site Sewage Management Strategy incorporates all on-site sewage management systems within the Walcha LGA that are not connected to the public reticulated sewerage system. The following are considered to be on-site sewage management systems, for which Council approval is required prior to installation or operation:

- Septic tank and absorption trenches
- Septic tank and evapotranspiration areas
- Septic tank and aerobic sand filters

- Aerated wastewater treatment systems (AWTS)
- Septic tank to pump-out
- 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
- Pit toilets
- Any other system that stores, treats and / or disposes of sewage and wastewater on-site

### 1.3. OBJECTIVES

The objectives of this On-Site Sewage Management Strategy are:

- 1.3.1. **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.
- 1.3.2. **Protection of surface water** – on-site sewage management systems 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).
- 1.3.3. **Protection of groundwater** – on-site sewage management systems 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.
- 1.3.4. **Protection of land** – on-site sewage management systems 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.
- 1.3.5. **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.
- 1.3.6. **Protection of community amenity** – on-site sewage management systems 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.

#### 1.4. GOALS

The goals of this On-site Sewage Management Strategy are to:

- 1.4.1. review council development standards and approval criteria for subdivision, development and building to ensure that appropriate provision is made for sustainable on-site sewage management when residential development occurs in non-sewered areas.
- 1.4.2. identify the additional resources needed to support on-site sewage management systems.
- 1.4.3. survey and maintain a database of all on-site sewage management systems.
- 1.4.4. identify additional public infrastructure needed to support on-site sewage management systems.
- 1.4.5. adopt a partnership approach with households and service agents to support continual improvement of on-site sewage management.
- 1.4.6. map and maintain details of soil and site conditions and suitability for on-site sewage management systems.
- 1.4.7. consult with householders on the development and implementation of a strategy to eliminate illegal discharges from pump-out systems.
- 1.4.8. specify qualifications and accreditation processes for third parties wishing to certify maintenance work and/or compliance with approval standards for all types of systems.
- 1.4.9. consult with local service agents to ensure that they are aware of qualification and accreditation procedures.
- 1.4.10. ensure that all on-site waste management systems assessed as being high or medium risk are inspected by qualified and accredited people at the intervals determined through the risk assessment process.
- 1.4.11. to co-operate with householders, to develop site-specific sewage management plans which resolve identified problems.

1.4.12. to educate operators of on-site sewerage management systems to ensure they understand the best and most effective way to maintain their systems.

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## 2. LEGISLATION AND GUIDELINES

### 2.1. LOCAL GOVERNMENT ACT 1993

The local Government Act outlines the requirement of on-site sewage management system owners to obtain Council approval to operate a system of sewage management. This includes the operation of an existing system, or the installation and operation of a new system. The meaning of operate a system of sewage management is outlined in the Act, which states:

- (1) In this part, operate a system of sewage management means hold or process, or re-use or discharge, sewage or by-products of sewage (whether or not the sewage is generated on the premises on which the system of sewage management is operated).*
- (2) Without limiting subsection (1), operate a system of sewage management includes the following:*
  - (a) Use artificial wetlands, transpiration mounds, trenches, vegetation and other effluent polishing, dispersal or re-use arrangement in related land application areas,*
  - (b) Hold or process sewage that is to be subsequently discharged into public sewer.*
- (3) However, operate a system of sewage management does not include any of the following:*
  - (a) Any action relating to the discharge of sewage directly into a public sewer,*
  - (b) Any action relating to sewage or by-products of sewage after their discharge into a public sewer.*

Under the Act, Council is required to maintain a register of on-site sewage management systems within the LGA. Section 113 of the Act also states the items that must be included within the register.

Council may issue orders to direct a system owner to operate their system in a way that complies with the statutory requirements. Under the Act orders may be issued:

- To prevent environmental damage
- Not to commence, or to cease a hazardous activity

- To dispose of waste
- Not to operate an on-site sewage management system after a specific date
- To comply with the conditions of approval issued by Council
- To abate public nuisance
- To meet specified operational and performance standards

Offences under the Local Government Act include:

- Failure to obtain a Council approval
- Failure to comply with a Council approval
- Failure to comply with an order

## 2.2. LOCAL GOVERNMENT (GENERAL) REGULATION 2005

The Regulation provides a framework for the processes involved in the installation and operation of on-site sewage management systems. It also outlines the approval process and the items that Council needs to consider when determining an application for sewerage works, as well as the items that must accompany an application for approval to install a system of sewage management.

## 2.3. PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997

Under the Protection of the Environment Operations Act, it is an offence to pollute any water course or to permit disposal of waste to an unlawful disposal area, or to transport waste to an unlawful disposal area. Offenders may be issued with penalty notices or face prosecution. Heavy penalties apply to pollution offences under this Act.

## 2.4. ENVIRONMENT AND HEALTH PROTECTION GUIDELINES

*Environment and Health Protection Guidelines: On-site Sewage Management for Single Households* (E&HPG) has been developed by various NSW Government departments, and published by the NSW Department of Local Government to assist councils in regulating the installation and operation of on-site sewage management systems. The Guidelines provide technical guidance in the design, operation and maintenance of systems, as well as guidance in the process of supervision and monitoring of systems.

## 2.5. NSW DEPARTMENT OF HEALTH ACCREDITATION

The NSW Department of Health is responsible for accrediting human waste treatment or storage devices that are intended to receive domestic wastewater or human waste. Accreditation is mandatory for commercially manufactured units and for commercially distributed standard designs. Provision can be made for alternative system designs that have been developed by suitably qualified persons.

## 2.6. AUSTRALIAN STANDARDS

### *AS 1546.1 – On-site Domestic Wastewater Treatment Units – Septic Tanks*

Specifies a set of performance criteria for septic tanks which provide a base against which any septic tank, conventional or innovative, may be assessed. It also provides basic specifications covering septic tanks made of various materials. These specifications are to be used by manufacturers and quality assessors for demonstrating compliance or a product with the Standard.

### *AS/NZS 1547 – On-site Domestic Wastewater Management*

Specifies requirements for on-site domestic wastewater systems including both primary and secondary wastewater treatment units and associated land-application systems. The Standard gives specific details for septic tanks that receive domestic blackwater and greywater; and specific details for land-application and absorption systems, including conventional trenches and beds, evapo-transpiration systems, mounds and irrigation areas.

### 3. RESPONSIBILITIES

#### 3.1. COUNCIL RESPONSIBILITIES

Walcha Council responsibilities include:

- Ensuring approval is sought for the implementation and operation of on-site sewage management systems within Walcha LGA
- Assessing approvals and proposed systems
- Identifying all on-site sewage management systems within the LGA
- Supervising and monitoring the operating performance of each individual system by on-site inspections
- Development and maintenance of a register of on-site sewage management systems within the LGA
- Identifying the potential risk posed by systems and classifying systems, as well as identifying sensitive areas
- Enforcing compliance with operational standards, to protect the health of the public, the environment, and community amenity, including issuing orders and penalties for non-compliance
- Determining renewal of approvals to operate and on-site sewage management system
- Responding to complaints and pollution incidents
- Considering long term goals and solutions for enhanced protection of public health, the environment, and community amenity
- Monitoring and reporting on the overall impact of on-site sewage management systems within the LGA through State of the Environment Reporting
- Guiding system operators toward obtaining further information and assistance
- Striving for ESD through appropriate strategies

### 3.2. OWNER RESPONSIBILITIES

The individual owner is responsible for:

- Seeking approval from Council for the operation of an on-site sewage management system
- The maintenance and operation of their on-site sewage management system
- Determining the regular maintenance that is required for their system and gaining knowledge regarding the processes required to extend the life of their system, including the land used for the disposal area. This also includes implementing conservative use of water and avoiding strong chemicals so as to maintain efficient system performance, and as a result extend the operational life of the system
- Ensuring that their system is operating effectively and complies with approval conditions and statutory requirements, including not allowing wastewater to be discharged onto non-designated areas
- Ensuring that no wastewater is discharged to any watercourse, neither permanent nor intermittent
- Ensuring that manufacturer's instructions for use and maintenance of the system are followed to ensure effective and efficient system operation
- In the case of AWTS, owners must ensure that maintenance and service contracts are current and operational, as well as ensuring that the system is visited by a service provider every 3 months
- Ensuring that occupants are provided with the necessary information and support to successfully operate and maintain their on-site sewage management system, in the case of absentee owners
- Providing relevant information to Council as requested

## 4. INFORMATION

### 4.1. ON-SITE SEWAGE MANAGEMENT SYSTEMS REGISTER

Council records will include a register of all on-site sewage management systems that have undertaken registration within the LGA as required under the Local Government Act 1993. Under the Act the register is to include:

- The serial number that identifies the application for the approval
- The date on which the application for the approval was made to the council
- The amount of any fee payable in connection with the application
- The date or dates on which any such fee, or any part of it, was paid to the council
- The date from which the approval operates
- The name and address of the person to whom the approval is granted
- The name or address of any place in relation to which the approval is granted
- A brief description of the subject-matter of the approval
- Any conditions to which the approval is subject
- The duration of the approval
- Whether the approval has been revoked or modified

## 5. REGISTRATION AND APPROVAL

The owner of an on-site sewage management system is required to register their system and obtain approval to operate a system of sewage management

### 5.1. EXISTING SYSTEMS

The owner of an existing operating system must register their system with Council. The system owner is required to apply for approval to 'operate a system of sewage management', at which point the application will be assessed, and the system placed into a risk category of High, Medium, or Low. These categories refer to the potential for the system to adversely affect public health or the environment. The approval to 'operate a system of sewage management' will be issued to the system owner with attached conditions of consent as determined by Council.

The system may continue to be operated during the assessed period as long as the operation of the system complies with other relevant statutes.

### 5.2. NEW SYSTEMS

New on-site sewage management systems that have been installed must be registered with Walcha Council. The installation or construction of these systems must also be approved by Council. Furthermore, the applicant must supply an application for approval to 'operate a system of sewage management'. The application will be processed by Council and a determination issued to the application in relation to the risk posed by the system, along with the attached conditions of consent.

### 5.3. RENEWAL OF COUNCIL APPROVAL

Approvals will be renewed at varying increments, depending on the risk classification of the individual system. Renewal of approval to 'operate a system of sewage management' will occur as follows:

- **High** risk systems – every two (2) years
- **Medium** risk systems – every three (3) to five (5) years
- **Low** risk systems – every five (5) to seven (7) years

These time frames are in alignment with the inspection times for each risk category. Conditions of consent, relating to the approval to operate, may be altered by Council at the time of renewal of that approval. In each case the conditions of approval set by

Council will be influenced by specific system design, site conditions, as well as risks posed by the system.

#### 5.4. TRANSFER OF OWNERSHIP

Approvals to operate on-site sewage management systems are granted to the owners of properties with these systems installed. Therefore approval must be reissued with the transfer of ownership. Purchases of land must apply for approval to 'operate a system of sewage management', and register the system in their name.

The Local Government (General) Regulation 2005 provides that a person who purchases land, on which any sewage management facilities are installed, may continue to operate such a system, for a period of three months from the date of purchase without the approval of Council.

It is further provided that, if a person who purchases, or otherwise acquires land on which an on-site sewage management system is installed, applies for an approval within two months of the transfer of ownership, they may continue to operate the system until such times as a final determination has been made by Council.

It should be noted that an approval to 'operate a system of sewage management' extends to all owners of the land (or occupiers of the land), regardless of the name in which the system is registered.

## 6. MONITORING PROGRAM

### 6.1. RISK ASSESSMENT AND CLASSIFICATION

In order to enhance the effectiveness of the monitoring process, a classification system has been developed, which includes categories of low, medium, and high risk posed by on-site sewage management systems, to public health and the environment.

### 6.2. PRELIMINARY CLASSIFICATION

Council will complete a desk-top audit to determine the preliminary classification of an on-site sewage management system. This will be followed by an on-site inspection and review of classification.

When assessing the level of risk, the Council Officer or Accredited Service Technician will utilise the adopted risk assessment criteria (see Appendix 9.1), together with information provided by the householder on their application forms, council's planning documents, information from relevant authorities and his or her own knowledge of the area.

Council will also utilise a site assessment checklist, including recommended buffer distances (see Appendix 9.2). Any other potential hazards that can be identified will also be noted and taken into consideration by the assessing Council officer.

### 6.3. ON-SITE INSPECTION

Council will inspect all on-site sewage management systems within the Walcha LGA. Individual systems will be assessed on their performance as outlined under the Regulation, and in the E&HPG.

The minimum performance requirements for on-site sewage management systems are:

- 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 impact on the amenity of the premises and surrounding lands

- If appropriate, provision for the reuse of resources including nutrients, organic matter, and water

The on-site inspection and review of classification will assess the cumulative impact of potential hazards, including those determined by the preliminary assessment, as well as those identified on-site. The on-site inspection will assess parameters such as site drainage, run-on and upslope seepage, erosion potential, operating performance of the system, and any other identifiable signs of potential hazard.

The Council officer conducting an inspection will utilise a site assessment checklist (see Appendix 9.2) to assist with the determination of risk classification, and identification of risks associated with the system.

During an inspection of an on-site sewage management system, a Council officer may:

- Open ground and take any necessary reasonable measures to determine the type, condition or location of the sewage management system
- Require any person at the premises to answer questions or to provide information in relation to the sewage management system
- Take samples or photographs in connection with the assessment of the sewage management system
- Carry out additional functions sanctioned by a condition of an approval or by an agreement with the owner

#### 6.4. INSPECTION FREQUENCY

Inspection frequency varies for on-site sewage management systems, depending on the risk classification of the individual system. The inspection time frame will be as follows:

- **High** risk systems – every two (2) years
- **Medium** risk systems – every three (3) to five (5) years
- **Low** risk systems – every five (5) to seven (7) years

Council maintains the ability to conduct on-site inspection at any time where it is deemed appropriate or necessary for the protection of public health and the environment.

Prior to an inspection being carried out by a Council officer, written notification will be provided. Inspection by Council officers will only be made at a reasonable time during the day or during business operating hours.

## 6.5. RE-CLASSIFICATION

The classification of an on-site sewage management system may be altered during an assessment, as well as at other times as Council deems appropriate. A system classification may be amended to a higher or lower risk category as determined by the assessing Council officer. The implementation of upgraded systems may result in a lower risk category being assigned to a particular system, which will reduce costs to the owner in relation to monitoring fees.

## 6.6. AERATED WASTEWATER TREATMENT SYSTEMS (AWTS)

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

Inspections of AWTS installations will also be carried out under this Strategy. The inspections will focus on the adequacy of the treated effluent application areas and as to whether the required quarterly servicing of such systems is being carried out. These systems have a greater opportunity to be placed in lower risk categories due to private servicing occurring in addition to Council inspections.

## 6.7. FINANCIAL HARDSHIP AND UPGRADING FAILING SYSTEMS

During all inspection of on-site sewage management systems, Council officers will discuss options and time frames for repair, operation or maintenance of defective or failing sewage management systems with owners. Council officers will attempt to establish a compliance period suitable for the landowner if the risk to public health and the environment is able to be satisfactorily limited. It can be assumed that in some circumstances this negotiation will not be sufficient and some owners will not be financially capable of carrying out the required repairs.

In these situations, which will each be assessed on their merit, Council may agree that only measures and upgrading that are needed to bring the system to manageable standards are carried out until:

- Sale of the property
- Change in occupancy
- Change in financial status

When sale of the property, change in occupancy, or change in financial status does occur, the appropriate repairs will be required.

## 7. RESOURCES

Fees associated with approvals to operate systems of sewage management, and the monitoring of these systems, will be structured so that income from the program equals costs, therefore rendering the program revenue neutral.

### 7.1. FEES

Fees associated with the OSSM systems and subsequent monitoring will be as follows:

<b>Description</b>	<b>Fee (\$)</b>
Application to install and/or operate an on-site sewage management system	170
Inspection fee (including renewal to operate and on-site sewage management system)	170

## 8. GLOSSARY

**Act, the** – For the purposes of this strategy refers to the Local Government Act 1993.

**Aerated Wastewater Treatment System (AWTS)** – Aerated wastewater treatment systems treat all household wastewater and have several treatment compartments. The first is like a septic tank, but in the second compartment air is mixed with wastewater to assist bacteria with break down of solids. A third compartment allows settling of more solids and a final chlorination contact chamber allows disinfection.

**Blackwater** – human excreta and water grossly contaminated with human excreta.

**Catchment** – A catchment is an area of land with natural features such as hills or mountains, from which all run-off water flows into a creek, river, lake or ocean.

**Composting Toilets** – Composting toilets collect and treat toilet waste only. Water from the shower, sink and washing machine needs to be treated separately. The compost produced by a composting toilet has special requirements but is usually buried on site.

**Council** – for the purposes of this strategy refers to Walcha Council.

**DCP** – Development Control Plan within the meaning of the Environmental Planning and Assessment Act 1979.

**Desludging** – Withdrawing of sludge, biosolids, scum and liquid from a septic tank.

**Ecologically Sustainable Development** – Development that improves the quality of life, both now and for the future, in a way that maintains the ecological processes on which life depends.

**Effluent** – wastewater discharging from a sewage management facility.

**Effluent application area** – an area of land specifically designated for the application of effluent either by subsurface absorption or by surface irrigation.

**Evapotranspiration** – process by which soil moisture is subject to processes of evaporation from the sun and wind and is transpired to the atmosphere via trees and plants.

**Greywater (or sullage)** – domestic effluent, excluding toilet waste.

**Ground Water** – All naturally occurring underground waters.

**Guidelines** – Environment and Health Protection Guidelines: On-site Sewage Management for Single Households.

**LGA** – Local Government Area.

**On-site Sewage Management System** – Any facility that stores, treats and/or disposes of sewage and wastewater on-site.

**Pump-out System** – A septic system where all accumulated wastewater is removed from site by a purpose built road tanker.

**Regulation, the** – For the purposes of this strategy refers to the Local Government (General) Regulation 2005.

**Reticulated Sewer** – Centralised sewerage system, consisting of a wastewater transport network, pumping stations, and treatment facilities designed to service multiple users concurrently.

**Run-off** – The part of precipitation of irrigated effluent that becomes surface flow because it is not immediately absorbed into or detained by the soil.

**Septic tank** – conventional septic tank systems treat both greywater and blackwater, but they provide only limited treatment through the settling of solids and the flotation of fats and greases. Bacteria in the tank break down the solids over a period of time. Wastewater that has been treated in a septic tank can only be applied to land through a covered soil absorption system as the effluent is still too contaminated for above ground irrigation.

**Sewage** – human wastewater and matter which usually passes through the reticulated sewer or an on-site sewage management system.

**Sewage Management** – Any activity carried out for the purpose of holding, processing, reusing, or otherwise disposing of sewage or by-products of sewage.

**Total Catchment Management** – Total Catchment Management is the co-ordinated and sustainable use and management of land, water, vegetation and other natural resources on a catchment basis so as to balance resource utilisation and conservation.

**Wastewater** – Blackwater and/or Greywater.

## 9. APPENDIX

### 9.1. RISK ASSESSMENT CRITERIA

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			
Distance to downhill 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			
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. 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.

## 9.2. SITE ASSESSMENT CHECKLIST

Site Assessment Checklist		
Site Feature	Risk Category	Assessment
Flood potential	<b>Low:</b> above 1 in 20 yr flood level	
	<b>Medium:</b> n/a	
	<b>High:</b> below 1 in 20 yr flood level	
Exposure	<b>Low:</b> high sun and wind exposure	
	<b>Medium:</b> medium sun and wind exposure	
	<b>High:</b> low sun and wind exposure	
Aspect	<b>Low:</b> north, unshaded	
	<b>Medium:</b> east or west, moderate shade	
	<b>High:</b> south, heavily shaded	
Slope	<b>Low:</b> flat 0 - 10 %	
	<b>Medium:</b> gentle 10 - 20 %	
	<b>High:</b> steep > 20 %	
Landform	<b>Low:</b> hill crests, convex side slopes and plains	
	<b>Medium:</b> concave side slopes and foot slopes	
	<b>High:</b> drainage plains and incised channels	
Fill	<b>Low:</b> no fill	
	<b>Medium:</b> fill present	
	<b>High:</b> n/a	
Property area	<b>Low:</b> > 2.5 hectares	
	<b>Medium:</b> 1 - 2.5 hectares	
	<b>High:</b> < 1 hectare	
Geology	<b>Low:</b> geological discontinuities absent	
	<b>Medium:</b> n/a	
	<b>High:</b> geological discontinuities (being faults etc.), fractured or highly porous regolith (being all earth above bedrock ie. Soil etc.)	
Soil type	<b>Low:</b> deep clay loam or sandy loam	
	<b>Medium:</b> shallow loam or clay	
	<b>High:</b> heavy clay or sand	
Type of system	<b>Low:</b> trenches, or subsurface irrigation	
	<b>Medium:</b> trenches, or subsurface irrigation (unknown location)	
	<b>High:</b> surface broadcast, or surface irrigation	
Site drainage On-site comment		

<b>Run-on &amp; up-slope seepage</b> On-site comment		
<b>Erosion potential</b> On-site comment		
<b>System performance</b> On-site comment		
<b>Buffer distances</b> see E&HPG recommendations in Table 2	<p><b>Low:</b> if complies with Environment &amp; Health Protection Guidelines</p> <p><b>Medium:</b> n/a</p> <p><b>High:</b> does not comply with Environment &amp; Health Protection Guidelines</p>	

<b>Recommended Buffer Distances</b>	
<b>All land application systems</b>	<ul style="list-style-type: none"> <li>▪ 100 metres to permanent surface waters (e.g. river, streams, lakes)</li> <li>▪ 250 metres to domestic groundwater well</li> <li>▪ 40 metres to other waters (e.g. farm dams, intermittent waterways and drainage channels)</li> </ul>
<b>Surface spray irrigation</b>	<ul style="list-style-type: none"> <li>▪ 6 metres if area up-gradient and 3 metres if area down-gradient of driveways and property boundaries</li> <li>▪ 15 metres to dwellings</li> <li>▪ 3 metres to paths and walkways</li> <li>▪ 6 metres to swimming pools</li> </ul>
<b>Surface drip and trickle irrigation</b>	<ul style="list-style-type: none"> <li>▪ 6 metres if area up-gradient and m metres is area down-gradient of swimming pools, property boundaries, driveways and buildings</li> </ul>
<b>Subsurface irrigation</b>	<ul style="list-style-type: none"> <li>▪ 6 metres if area up-gradient and m metres is area down-gradient of swimming pools, property boundaries, driveways and buildings</li> </ul>
<b>Absorption system</b>	<ul style="list-style-type: none"> <li>▪ 12 metres if area up-gradient and 6 metres if area down-gradient of property boundary</li> <li>▪ 6 metres if area up-gradient and 3 metres if down-gradient of swimming pools, driveways and buildings</li> </ul>
<b>Other comments / risks to public health, the environment, or community amenity</b>	

### 9.3. ON-SITE SEWAGE MANAGEMENT SYSTEM STANDARD CONDITIONS OF APPROVAL

#### A. GENERAL CONDITIONS

1. The effluent disposal system shall be installed in accordance with plans stamped by Council except where varied by conditions of this consent.
2. All sanitary plumbing and drainage work shall be done in accordance with the requirements of Walcha Council, the Local Government (General) Regulation 2005, AS/NZS 15447:2000 On-site domestic-wastewater management and AS/NZS 3500 Plumbing and drainage.
3. All sanitary plumbing is to be carried out by a licensed Plumber and Drainer.
4. Twenty four hours notice shall be given to Council to inspect all drainage works before completion. Inspections are required at the following stages of construction:
5. Internal drains, under water test, prior to backfilling.
6. External drains, under water test, prior to backfilling.
7. Underground disposal areas with aggregate and geotextile or hessian in place, prior to backfilling.
8. Final inspection when all earth & other works are complete.
9. Manually operated cisterns shall be installed.
10. The horizontal length of pipe between the outlet of the pan and the junction with another waste to the main drain line does not exceed 3 metres.
11. Elevated pipe lines are adequately supported.
12. The site has been inspected and Council considers that effluent and sullage can be completely disposed of on the site without nuisance or likely danger to health.
13. The site has been inspected and is suitable for the collection of effluent by the removal vehicle.
14. The allotments on which the building and on site sewage management system are situated are maintained in one ownership and are not separately disposed of whilst the on site sewage management system is in use.
15. An adequate water supply is available at all seasons of the year.
16. The conditions stipulated by the ..... in its letter of .....are complied with.

17. The contents of the existing ..... are to be removed in an approved vehicle to the sanitary depot/sewage treatment works for disposal.
18. This consent relates to the approval for the installation of an on-site waste management system.
19. Where the sewer pipes cross vehicular access areas, either the pipes shall be sleeved in cast iron or shall be surrounded with cement stabilised sand backfill (10:1 ratio).
20. Further details in relation to ..... shall be submitted to Council in duplicate, for approval, prior to commencement of the relevant work.
21. Council has assessed your on-site sewage management system as being in the .....risk category. You are therefore required to arrange for an inspection by Council every.....years. Your next inspection is due on.....

PLEASE NOTE: It is the responsibility of the land owner to ensure that the disposal area is large enough to dispose of effluent generated within the home. Landowners must regularly check the disposal area for signs of effluent ponding at ground level and take any action necessary to ensure that this does not occur. Soil conditions, rainfall and volumes of waste generated vary from site to site. The area provided for disposal and approved by Council is only done so on the condition that land owners monitor the performance of the system and take quick action to rectify any problems should it be necessary.

## **B. SEPTIC TANKS**

1. The septic tank is elevated as high as the minimum fall of the pipe line from a "P" trap pan to the septic tank, will permit, and the elevated pipes are adequately supported.
2. The septic tank is elevated so that the effluent can be discharged into an absorption trench in the approximate position indicated on the plan.
3. The septic tank is located not less than 1.5m from any building.
4. All sullage not treated in the septic tank or directed to the collection well must be disposed of in a manner so as not to create any nuisance or pollute any water course.

5. The minimum capacity of the septic tank shall be 3,000 litres. The septic tank shall be approved by the NSW Dept. of Health. Documentation confirming NSW Department of Health approval shall be provided to Council prior to commencement of any work.
6. No water supply or any source of water supply used for drinking or domestic purposes or for stock shall be polluted or rendered un-wholesome by the disposal of effluent from the proposed septic tank.

**C. DISPOSAL AREAS**

1. The ..... is or are constructed in the approximate position indicated on plan.
2. The absorption trenches are constructed parallel with the contour of the land in the approximate position indicated on plan.
3. The disposal area is retained and filled with absorbent soil as indicated on the plan. Such work to be carried out to the satisfaction of Council.
4. The disposal area is terraced and filled with absorbent soil as indicated on the plan. Such work to be carried out to the satisfaction of Council.
5. An impervious retaining wall is erected in the approximate position shown on the plan and the area filled with absorbent soil to Council's satisfaction.
6. The disposal area is prepared by covering with at least ..... mm of absorbent soil.
7. Transpiration beds are constructed to the requirements of Council in the approximate position shown on the plan.
8. The depressions in the disposal area are filled with absorbent soil and the site graded to an even grade.
9. Vehicular traffic and stock are excluded from the disposal area.
10. All stormwater and seepage from higher levels is diverted from the disposal area by a dish drain or diversion bank.
11. The .....wastes are treated in the septic tank.
12. The .....wastes are discharged to a .....
13. A minimum buffer zone of 3 metres to the uphill boundary and 6 metres to the downhill boundary shall be maintained.

14. The disposal area is sited so as not to contaminate the natural watercourse which traverses the property.
15. The absorption trench shall be 600mm wide x 600mm deep and a minimum of ?? metres in length.
16. Hessian or geotextile shall be placed over the layer of 20mm aggregate within the absorption trench prior to the soil being placed over the top of the aggregate.
17. 20mm aggregate shall be placed around the absorption trench and to a point 150mm below ground level.
18. The evapo-transpiration bed is constructed with a 600mm excavation, 20mm aggregate laid to a depth of 450mm and a 50/50 sand and top soil mix laid over this. Geotextile or hessian shall be sandwiched between the aggregate and top soil. Distribution lines shall be a maximum 2 metres apart.
19. Approved plants from Council's list shall be established on evapo-transpiration beds.
20. A distribution box shall be installed to facilitate even distribution to the separate disposal areas. Access to the distribution box shall be maintained at all times. The distribution box shall be protected by concrete or other Council approved means.

#### **D. COLLECTION WELLS**

1. An automatically operated pump is provided to operate when the collection well contains .....litres.
2. The collection well is emptied at least ..... and the contents removed in an approved vehicle to the sanitary depot for disposal.
3. The suction line is to be fitted with a gate valve and approved lock device at the .....boundary.
4. An additional stand-by pump shall be provided in the event that a break-down occurs.
5. The collection well pump shall be fitted with a visible alarm within the house. This alarm shall be connected such that it alerts dwelling occupants in the event of a pump failure.

## **E. AERATED WASTE TREATMENT SYSTEMS (AWTS)**

1. All effluent arising from the aerated waste treatment system (AWTS) must be managed wholly within the property where the system is installed.
2. Effluent from the AWTS must not be permitted to discharge into any natural waterway or storm water drain. Where the land application is by spray irrigation, the land application area should not be used for passive or active recreation purposes.
3. The land application area must not be used to grow vegetables or fruit for human consumption.
4. The irrigation system must be operated in such a way so as to prevent any run-off of effluent from the land application area.
5. If required, the land application area should be landscaped by terracing and filling or retaining and filling so as to provide a relatively level area for the irrigation system.
6. The AWTS unit shall be maintained by an approved service agent. A copy of the Service Report sheet shall be provided to Council on a *(insert frequency)* basis.
7. All effluent land application areas must be completely prepared or landscaped to the satisfaction of Council before occupation of the dwelling or commissioning of the AWTS.
8. Within the effluent irrigation areas there must be at least two warning signs that comply with AS 1319 and have 1) a green background 2) 20mm high capital lettering in black or white, and 3) the words "RECLAIMED EFFLUENT – NOT FOR DRINKING – AVOID CONTACT".
9. A permanent and durable label shall be installed in the electrical meter box of the dwelling stating "THIS HOME HAS AN AERATED WASTE TREATMENT SYSTEM FOR PROCESSING SEWAGE WASTE. IT MUST BE SERVICED *(insert frequency)*..... BY AN APPROVED TECHNICIAN. FAILURE TO SERVICE THIS SYSTEM MAY LEAD TO DISEASE TRANSMISSION, DAMAGE TO THE ENVIRONMENT OR BLOCKAGES".

#### 9.4. SYSTEM OPERATION

<b>Existing Systems</b>	
<b>Performance Criteria</b>	<b>Acceptable Solution</b>
Appropriate registration and approvals have been sought from Walcha Council	An application for approval to 'operate a system of sewage management' must be submitted to Council. System registration is included in this process.  Maintenance work on the system or pipes and fittings will require Local Approval from Council.
Effective system operation and maintenance  Ensure conservative water use strategies  Ensure appropriate cleaning products are used within the household	All systems must be operated to the manufacturer's guidelines. AWTS must be serviced quarterly.  Limiting showering time, washing clothes throughout the week rather than on the weekend exclusively.  Avoid or minimise putting cleaning agents, detergents, disinfectants, bleaches, alkalis, oil, paint, petrol, acids, degreasers, photography chemicals, cosmetics, lotions, pesticides or herbicides into the system. These chemicals, even in small amounts, can upset the proper functioning of the system.
Awareness of health risks	Owners need to become aware of health risks involved with operating a system of sewage management, and how to manage those risks.
Manage the environmental impact of wastewater	System owners must ensure that their system is operating effectively.
Awareness of where to find further information	Walcha Council – Environmental Services Department on 02 6774 2515

<b>New Systems</b>	
<b>Performance Criteria</b>	<b>Acceptable Solution</b>
Appropriate registration and approvals have been sought from Walcha Council	An application for approval to 'operate a system of sewage management' must be submitted to Council. System registration is included in this process.  Maintenance work on the system or pipes and fittings will require Local Approval from Council.
Appropriate system installation / construction	A service agent must install a new on-site sewage management system, and a licensed plumber / drainer must install all sanitary pipes and fittings.
Effective system operation and maintenance  Ensure conservative water use strategies  Ensure appropriate cleaning products are used within the household	All systems must be operated to the manufacturer's guidelines. AWTs must be serviced quarterly.  A dual flushing cistern with 3/6 litre flush, and AAA fittings (shower heads and taps) must be installed.  Limiting showering time, washing clothes throughout the week rather than on the weekend exclusively.  Avoid or minimise putting cleaning agents, detergents, disinfectants, bleaches, alkalis, oil, paint, petrol, acids, degreasers, photography chemicals, cosmetics, lotions, pesticides or herbicides into the system. These chemicals, even in small amounts, can upset the proper functioning of the system.
Awareness of health risks	Owners need to become aware of health risks involved with operating a system of sewage management, and how to manage those risks.
Manage the environmental impact of wastewater	System owners must ensure that their system is operating effectively and install their system in accordance with statutory requirements and departmental recommendations (including selecting a system appropriate for the environment and maintain buffer distances).
Awareness of where to find further information	Walcha Council – Environmental Services Department on 02 6774 2515