

Glenthompson Onsite Wastewater Management Audit Program

Project Report

April-May 2016



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Executive Summary

In 2013 Southern Grampians Shire Council (SGSC) made a commitment to the 2014/15 and 2015/16 budgets to commence onsite wastewater system audits across five (5) of the most densely populated, un-sewered, small towns within the municipality. In doing so Branxholme was selected to initiate the project and Australian Water Environments (AWE) were engaged to prepare a feasibility study of the options available for managing domestic wastewater within the township. This audit of Glenthompson is the fourth program of this nature rolled out by Southern Grampians Shire Council. Previous audits have been conducted in Branxholme (2012-13), Hiller Lane Hamilton (2013-14) and Penshurst (2014-15).

Glenthompson is a small township located approximately 50km east of the Shire's municipal business centre, Hamilton. Glenthompson has a population of 123 people and has a total of 89 private dwellings, all serviced by domestic onsite wastewater systems (Government, 2016). There are three main drivers for the instigation of this project that have been identified by Council in conjunction with residents;

- 1. Council and residents recognise that future growth in Glenthompson will depend on a better understanding of the infrastructure required to sustain growth within the township, and;
- Council and residents have identified that current onsite wastewater management conditions
 within Glenthompson may be substandard, and that existing onsite wastewater management
 systems may be aging and prone to failure. This understanding presents an increased public
 health and environmental risk to the community in the immediate future.
- 3. The community of Glenthompson has recognised that there may be opportunities to improve domestic wastewater management in the town centre and has included in their community plan that working with Council to begin discussion around these opportunities is a high community priority (Council, 2015)

This project involved an assessment of the existing onsite wastewater management issues within the township of Glenthompson with the intention to seek potential approaches that may be implemented to address the current and impending issues across the study area.

The methodology of this study has been underpinned by previous experience in the assessment and identification of issues in the townships of Branxholme and Penshurst and is guided by relevant legislation and policy in conjunction with a thorough analysis of the natural and built heritage of the region, physical characteristics (i.e. topography, soil and catchment hydrology); stakeholder engagement sessions and knowledge of existing wastewater systems within Glenthompson. Based on the learning's from previous assessments in similar townships, the utilisation of local staff to assist in the program has proved to be a valuable resource.

In the past five (5) years there has been minimal reported growth, with no prediction for further evolution in the coming years. It is understood that any future development would be underpinned by suitability for onsite wastewater management within the previously subdivided allotments. The study identifies the importance of support to water corporations, communities and state and local government to identify and develop affordable solutions as a feasible alternative to the traditional gravity sewer, which cannot be justified in un-sewered small townships with a low rate of population growth.

Contents

Ac	knowledgements	i
Do	ocument History & Status	i
Ex	ecutive Summary	ii
1.	Introduction	1
	1.1 Background	1
	1.2 Timeline	2
	1.3 Study Area	2
2.	Review of Literature	3
	2.1 Victorian Legislation	3
	2.1.1 Environment Protection Act 1970	3
	2.1.2 State Environment Protection Policies (SEPP) Waters of Victoria Policy 2003 (as amended)*	4
	2.1.3 Local Government Act 1989	5
	2.1.4 Water Act 1989	5
	2.1.5 Planning and Environment Act 1987 - Direction No 6 Rural Residential Development (October 1997 Guidelines)	5
	2.1.6 Southern Grampians Shire Council Planning Scheme	5
	2.1.7 Building Regulations 2006	6
	2.1.8 Public Health and Wellbeing Act 2008	6
	2.1.9 Code of Practice – Onsite Wastewater Management 2016	6
	2.1.10 Code of Practice - Small Wastewater Treatment Plants 1997 (EPA)	7
	2.1.11 Guidelines for Aerated On-site Wastewater Treatment Systems 2002	8
	2.1.12 Australian Standards	8
	2.1.13 Southern Grampians Shire Council Geographical Information	9
	2.1.14 Southern Grampians Shire Council Plan.	9
	2.1.15 Southern Grampians Shire Council – Environmental Health Service Plan	11
	2.1.16 Southern Grampians Shire Council – Sustainability Strategy 2010-2020	11
	2.1.17 Glenthompson Community Plan	12
	2.2 Other Projects	12
	2.2.1 Small Towns Water Quality Program	12
3.	Methods	13
	3.1 Stakeholder Engagement - Community	13
	3.1.1 Community Information Session	13

	3.2 Stakeholder Engagement – Agencies	13
	3.2.1 Department of Environment, Land, Water and Planning	13
	3.2.2 Wannon Water	14
	3.2.3 Environment Protection Authority	14
	3.2.4 Glenelg Hopkins Catchment Management Authority	14
	3.3 Audit Program	15
4.	Outcome	15
	4.1 Minor Non-compliances	16
	4.2 Major/Critical Non-compliances	17
	4.3 Community Education	18
5.	Discussion and Recommendations	18
	5.1 Community Response	18
	5.2 Recommendations and Conclusions	19
6.	References	20
7.	Appendices	23
	A1: Community Information Letter Template	23
	A2: Glenthompson Community Information Session Presentation	24
	A3: Onsite Wastewater Audit Inspection Form Template	25
	A4: Resident Inspection Report Letter Template – Compliant	
	A5: Resident Inspection Report Letter Template – Minor/Major Non-Compliance	29
	A6: Resident Inspection Report Letter Template – Critical Non-Compliance	30
	A6: Property Inspection Results Spreadsheet Data	31
Ta	able of Figures	
Fig	gure 1: Designated Glenthompson Study Area	2
	gure 2 Land Capability Estimation by Lot Size	
	gure 3: Compliance of Onsite Wastewater Systems	
	gure 4: Common Minor Non-compliances	16 17
	2111 P. A. COLOUTO IN INCOLOUTO INCOLOUTO IN	

1. Introduction

1.1 Background

SGSC has a number of un-sewered townships where onsite systems are used to manage domestic wastewater. The larger towns of Hamilton, Dunkeld and Coleraine are provided with a reticulated sewer by the regional water authority, Wannon Water. There are small areas on the outskirts of the major towns which are also not connected to reticulated sewerage systems.

Onsite systems are an acceptable method of dealing with wastewater if the effluent is contained on-site and disposed of effectively and safely. However if effluent is discharged from a property it can pollute soil, waterways or groundwater and create risk to the environment, public health and amenity. Council's Environmental Health department receives occasional reports and complaints of odour and grey water, or effluent discharging from properties, causing a nuisance and potentially a human health and environmental hazard.

Onsite systems require routine maintenance to remove accumulated solids in the tank and prevent sludge damaging effluent trenches. Systems have an expected lifespan of 25-30 years; after which the trenches are likely to require re-construction. Many systems in Glenthompson are believed to be 40-60 years old, and have reached the sunset of their expected life. Furthermore, wastewater management system design standards have improved over time to address wastewater quality.

The 2006 Domestic Wastewater Management Plan indicates extensive issues across the Shire but does not specify individual properties; therefore an audit is required in each township to identify what interventions should be implemented. Additionally, inquiry into the Environment Protection Authority (EPA) in Victoria has recently concluded. In response to this, SGSC seeks to gather supporting data in relation to the importance of the EPA in wastewater management and public health issues associated with sub-standard systems.

Septic tank systems require an area of land to effectively dispose of effluent, the size of this area being dependent on topography, rainfall, soil type, depth, distance from waterways, flood frequency, wind and sun exposure and also on the amount of wastewater generated. Typically a minimum allotment size of 2200m^2 (0.22 hectare) is needed. In Glenthompson there are a number of allotments (70%), both developed and undeveloped, below the 2200m^2 implied thresholds and this potentially hampers the subdivision and development of the town (SGSC 2015).

1.2 Timeline

01 January 2016 - 06 April 2016

Planning and Project Preparation

06 April 2016

Community Meeting – Pre Audit Information Session

26 April 2016 – 06 May 2016

Onsite Wastewater Audit Inspections

02 May 2016 - 26 May 2016

Follow up audit inspections and data collation.

07 June 2016

Inspection result letters mailed to residents/property owners

03 August 2016

Community Findings Meeting

1.3 Study Area

The study area was determined based on SGSC Planning Scheme Township Zone designation (Southern Grampians Shire Council, 2014). The area of study contains the specified township zone, bound by Mitchell Street to the North, Thompson and Donald Forbes Streets to the East, Brady Street to the South and McLeod Street to the West. An additional property of community interest from outside the set parameters was the Glenthompson Brickworks. This site although significant to the community underwent recent foreclosure and was therefore not considered for assessment based on this finding.



Figure 1: Designated Glenthompson Study Area

2. Review of Literature

2.1 Victorian Legislation

2.1.1 Environment Protection Act 1970

This legislation confers responsibility to Council for approving the installation and alteration of wastewater disposal systems that generate 5000 litres of wastewater or less per day (via permits under s.53M).

Wastewater systems that are capable of treating over 5000 litres of wastewater per day are required under this legislation to be licensed by the Environment Protection Authority.

Provisions relevant to the role of local government include:

- Council may refuse the application if the site is unsuitable; the area available for the treatment or disposal of effluent is insufficient; the system is not of a type approved by the EPA or does not comply with the relevant State Environment Protection Policies (SEPP); or, does not treat all sewage.
- Property owners are required to operate and maintain the systems in accordance with the permits and EPA licence requirements.
- Council is required to lodge an annual return with the EPA outlining the number of permits issued and the number of systems disconnected, inspected and operating.

The legislation confers powers to Council's Environmental Health Officers to enter any property to investigate failing septic systems with permits and the duty to serve notices requiring the repair of failing or defective systems. The property owner is responsible for undertaking corrective action.

In terms of broader environmental protection and public health issues that may relate to the management of wastewater systems, relevant provisions of the legislation are:

- Section 38 requires that any 'discharge or deposit of waste into waters'
 must be in accordance with the declared state environment protection
 policy (SEPP) or waste management policy, which includes the SEPP
 Waters of Victoria 2003.
- **Section 39** sets down the requirements that no person shall pollute any waters so that the condition of the waters are made:
 - noxious or poisonous;
 - harmful or potentially harmful to the health, welfare, safety or property of human beings;

- poisonous, harmful or potentially harmful to animals, birds, wildlife, fish or other aquatic life;
- poisonous, harmful or potentially harmful to plants or other vegetation;
- detrimental to any beneficial use made of those waters.

Section 39 also states that any person shall not cause or permit waste to be placed or left in any position whereby it could reasonably be expected to gain access to any waters and result in those waters being polluted.

2.1.2 State Environment Protection Policies (SEPP) Waters of Victoria Policy 2003 (as amended)*

This policy deals with the protection of waterways. Clause 32 details the requirements for managing domestic wastewater, including the requirements that council:

- Assess the suitability of land that is proposed for development for its capacity to absorb wastewater on-site. This may require completion of a land capability assessment.
- Ensure that wastewater systems installed in unsewered areas are consistent with EPA guidelines and the Septic Tank Code of Practice 2016.
- Identify properties in unsewered areas that are discharging off-site or contaminating groundwater.
- Develop wastewater management plans to address problems relating to wastewater disposal and ensure the proper design and management of future systems.
- Ensure that land that cannot absorb wastewater on-site is either not developed or, if developed, is connected to a sewerage system.

With respect to the review into the SEPP (WoV) policy, Southern Grampians Shire Council provided feedback to this process in July 2015 advocating the importance of wastewater management in the policy. The key focus of Council's feedback into this review was the promotion of reticulated sewerage system extensions to support growth of small townships such as Glenthompson, along with improvement of public health outcomes resulting from mitigation of onsite wastewater management concerns on small allotments.

The feedback to the SEPP (WoV) review was echoed by Council in the review of the Water for Victoria discussion paper in April 2016. Additionally focus was placed on the importance of support to water corporations, communities and state and local government to identify and develop affordable solutions as a feasible alternative to the traditional gravity sewer, which cannot be justified in un-sewered small townships with a low rate of population growth.

^{*}Please note this policy is currently under review at the time of printing

2.1.3 Local Government Act 1989

This legislation enables Councils to enact local laws and set special charges for Council activities. Council may use these powers to raise revenue for its wastewater management programs and to develop local regulations for wastewater management, as long as these regulations are consistent with state policy and legislation.

2.1.4 Water Act 1989

The legislation regulates the water industry and describes the powers and responsibilities of water and sewage authorities. The legislation contains the following provisions relating to the options considered in this report:

- Within their sewer districts, sewer authorities may inspect and require
 property owners to repair or maintain their septic tank systems. If owners
 fail to undertake these works, authorities can undertake the work and
 recover costs from the property owners;
- Within their sewer districts and following the adoption of a by-law, authorities are able to: require regular maintenance of septic tanks; the payment of fees by property owners for works carried out by the authorities on their septic tank systems; prohibit septic tank discharge and impose penalties for breaches of the legislation.
- The legislation also confers power to the authority to force connections to the sewer (where available) and to recover the costs of repair of failing septic tank systems in their municipality.

2.1.5 Planning and Environment Act 1987 - Direction No 6 Rural Residential Development (October 1997 Guidelines)

This planning direction provides guidelines for planning authorities, including councils, which prepare amendments to allow rural residential development where the lots are larger than standard residential lots (usually at least 0.4ha). With respect to domestic wastewater management, the document indicates that the amendment can only proceed if the land has been:

- The subject of a land capability assessment, the results of which have been submitted to the EPA and the EPA has subsequently confirmed that the land will comply with the SEPP (Waters of Victoria).
- Found to have satisfactory physical characteristics for on-site sewage disposal or can connect to the sewer.

2.1.6 Southern Grampians Shire Council Planning Scheme

The Council's Planning Scheme outlines the permit and application requirements and decision guidelines for the rezoning and subdivision of land and the approval requirements for the construction of dwellings. With respect to domestic wastewater disposal and subdivisions/re zonings, the Scheme provides as follows:

• Permits are required for new subdivisions and proposed re zonings.

- For land zoned or proposed to be rezoned residential, all allotments must be serviced by sewer.
- For land or proposed to be rezoned township and low density residential, allotments must be serviced by sewer or be capable of treating wastewater on-site. Permit applications must include a land capability assessment. A minimum lot size is not specified for the township zone; however, 0.4ha is specified for the low density residential zone.
- In areas zoned low density residential, permits to build are required for a second dwelling on any lot and/or for lots that have planning overlays that require a permit.

2.1.7 Building Regulations 2006

Regulation 801 requires the issue of a 'report and consent' by Council before a permit is issued for any development that will involve the installation or alteration of a septic tank system. The report from Council indicates whether the block is suitable for development from a wastewater management perspective.

Regulation 1003 requires the issue of 'a report and consent' by Council prior to a certificate of occupancy being provided for any building development in an unsewered area where a septic tank system has been installed. The report from Council indicates that the septic tank system has been approved and is suitable for use.

2.1.8 Public Health and Wellbeing Act 2008

Section 60 of this legislation requires Council to remedy, as far as reasonable, all nuisances (i.e. activities that are dangerous to health or offensive), which exist in the municipality.

2.1.9 Code of Practice – Onsite Wastewater Management 2016

This code describes the measures that should be taken to ensure that domestic wastewater is treated and disposed of in a manner that minimises health and environmental risks, including for:

- The consideration of on-site wastewater management with the land development process.
- Designing, installing, operating and maintaining on-site wastewater treatment systems.

Guidance provided in the code in relation to;

 The selection, approval, management and maintenance of onsite wastewater management systems which treat up to 5000 litres (L) of wastewater per day.

- Systems which treat up to 5000 litres (L) per day of grey water to a quality fit for toilet flushing and cold water supply to clothes washing machines and/or land application.
- Existing offsite discharges of wastewater to a water way or storm water drain to be eliminated to improve the health and quality of waterways and neighbourhood amenity. Where existing offsite discharge of wastewater due to site restrictions, the new wastewater system must improve environmental public health outcomes.
- Land capability assessment procedures and wastewater flow calculations for designing effluent recycling and disposal systems.

The code states that the feasibility of providing a reticulated sewerage system should be seriously considered for the development of individual lots and for subdivision proposals that would result in allotments smaller than 10,000 m2 (one hectare). The code specifies that this area should not be seen as a minimum lot size but as a risk threshold for lots smaller than 10,000 m2.

The upgrade of existing onsite wastewater systems to meet 'best environmental outcomes' is detailed in the code and provides allowance for Council to approve upgrades of existing systems on small allotments whereby the requirements of the code cannot be met. In particular this section refers to the situation whereby a system of current standards could not be located on existing small allotments due to size constraints.

It is to be noted that the *EPA Code of Practice – Onsite Wastewater Management 891.4* was released in July 2016, one month after the completion of onsite assessments in Glenthompson. At the time of assessment *EPA Code of Practice – Onsite Wastewater Management 891.3* was in place.

2.1.10 Code of Practice - Small Wastewater Treatment Plants 1997 (EPA)

This Code provides design and operational guidelines for treatment plants that serve less than 500 people.

Performance objectives

Small wastewater treatment plants should be designed, constructed and managed to achieve the following environmental performance objectives:

- Any discharges to surface waters are to meet all statutory requirements;
- Measures employed to deal with emergencies are to be without damage to any surface waters or to the soil/land;
- All wastewater is to be treated and retained on land wherever practicable and environmentally beneficial; and
- Measures employed should conserve water resources or provide for the reuse or recycling of treated wastewater.

Where a discharge to surface waters is the only option available, effluent quality must satisfy the principles set out in *Managing Sewage Discharges to Inland Waters* (EPA Publication 473) and requirements of *SEPP (Waters of Victoria)*. Where no quantitative nutrient objectives are specified in the SEPP, the discharge must not cause the nutrient levels in the receiving stream to exceed those specified in *Preliminary Nutrient Guidelines for Inland Streams* (EPA Publication 478).

2.1.11 Guidelines for Aerated On-site Wastewater Treatment Systems 2002

These guidelines outline the design criteria, construction requirements and performance objectives that Aerated Wastewater Treatment systems must achieve to gain approval for use in domestic and small commercial situations. The document provides information on approval procedures, systems design, test criteria and renewal of application.

2.1.12 Australian Standards

Onsite treatment systems and associated disposal/recycling systems must be designed, installed and operated in accordance with the following Australian Standards. If there is any inconsistency between the Australian Standards and relevant codes of practice, the latter takes precedence.

- AS/NZS 1546.1, On-site domestic wastewater treatment units Part 1: Septic tanks
- AS/NZS 1546.2, On-site domestic wastewater treatment units Part 2: Waterless composting toilets
- AS/NZS 1546.3, On-site domestic wastewater treatment units Part 3: Aerated wastewater treatment systems
- AS/NZS 1546.4, Greywater Treatment Systems (not yet ratified)
- AS/NZS 4130: Polyethylene (PE) pipes for pressure applications
- AS/NZS 1319: Safety signs for the occupational environment.
- AS/NZS 3500 [set]: Plumbing and drainage.
- AS/NZS 1547: On-site domestic wastewater management

2.1.13 Southern Grampians Shire Council Geographical Information

The SGSC Geographical Information System (GIS), Intramaps, was utilised to provide a preliminary assessment of the allotment sizing within the study area. Using the parameters set by Council, mapping was generated to provide information about the potential capability of the land to withhold onsite wastewater treatment per allotment.

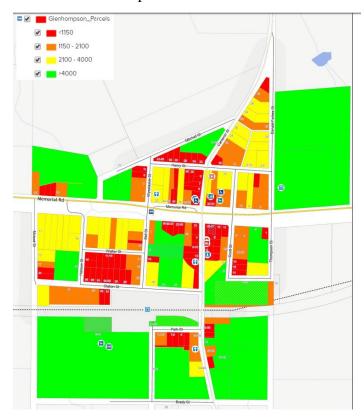


Figure 2 Land Capability Estimation by Lot Size

2.1.14 Southern Grampians Shire Council Plan

The SGSC 'Council Plan 2013-2017' identifies a number of key strategic objectives to be aligned with the work of the Council over the effective period of the plan. In order to implement the assessment of onsite wastewater management the project must align with the objectives of the plan in a manner suitable to meet the strategic objective of Council.

The five key objectives of the Council Plan identify a requirement for leadership and good governance, fostering of population and economic growth, enhancement of wellbeing and culture, assisting communities to feel dynamic and resilient and a requirement to manage environmental security. In terms of a proposal to assess wastewater management in Glenthompson there are multiple links to the Council Plan objectives that drive the need for such a project to be undertaken. The links in detail are;

Objective 1: Leadership and Good Governance

Outcome 1.1 - Soundly Based Decisions

Strategy 1.1.1 – Base decisions on the highest available level of professional advice and expertise

Outcome 1.2 - Sound Working Relationships and Strong Advocacy

Strategy 1.2.4 – Engage well with our communities on the issues important to their quality of life, health and wellbeing

Summary: Council has an obligation to make soundly based decisions determined by a strong advocacy in the community. The assessment of onsite wastewater management systems in Glenthompson seeks to identify the need for further strategic decisions to be made based on evidence into the future.

Objective 2: Foster Population and Economic Growth

Outcome 2.2 – Identifying and Preparing for Growth

Strategy 2.2.1 – *Implement the Planning Scheme Policy and strategies to ensure the orderly and sustainable development of the Shire*

Summary: An in depth knowledge of the condition and locations of onsite wastewater management systems within the municipality allows Council to determine the most restrictive aspect of population and economic growth in terms of availability of land for onsite disposal of effluent waste. The economic growth of Glenthompson is hinged on the capability of the existing land holdings to maintain all effluent onsite in order to meet the legislative requirements of the disposal.

Objective 4: Help Communities Feel Dynamic and Resilient

Outcome 4.1 – Maintaining Community Safety

Strategy 4.1.3 – *Managing the regulatory environment to protect amenity and safety.*

Outcome 4.2 – A Dynamic Community

Strategy 4.2.3 – *Providing the information and assistance the supports community empowerment.*

Summary: The inspection program seeks to provide the community with the tools and advice required to maintain the amenity and safety of the people in a manner conducive to empowerment of the community. The theoretical reasoning is that Council shall provide advice on the ways homeowners may wish to monitor and maintain their systems to ensure that the suitability and function of the systems is maintained long term.

2.1.15 Southern Grampians Shire Council – Environmental Health Service Plan

The Environmental Health Service Planning document compiled by SGSC identifies a number of key Environmental Health services to be provided by the department across daily activities. The three key activities to be undertaken in the area are all closely linked to the parameters of the Glenthompson Onsite Wastewater Management audit program and are key driving factors in the commencement of the program. The three key focus services areas are;

- Promotion of behaviour change to reduce exposure to public health risk through food safety, health, amenity and environmental education and programs.
- Administration of public health, amenity and environmental protection policies plans guidelines, legislation and Local Law.
- Participation in the development and implementation of public health and environmental protection management, strategic plans, policies and procedures.

These points of focus are achieved through the assessment, management and participation in monitoring of the onsite wastewater management systems in Glenthompson.

2.1.16 Southern Grampians Shire Council – Sustainability Strategy 2010- 2020

Similarly to the Environmental Health Service Plan, the SGSC Sustainability Strategy identifies a number of key objectives to be achieved within the duration of the strategy. A driving objective of the strategy is the consideration to sewage and greywater management within SGSC. The four sub-objectives of this are:

- Council to develop a Sewerage Strategy for townships and Hamilton.
- Council to continue to provide information about grey water best practice management to all Shire residents.
- Conduct feasibility studies for towns with no reticulated water supply or reticulated sewerage.
- Review and update the Domestic Wastewater Management Plan.

The implementation of this program addresses the issues identified in the strategy and seeks to provide support to the actions taken leading into 2020 and the sunset of this strategy.

2.1.17 Glenthompson Community Plan

In 2014 the community of Glenthompson, in consultation with SGSC, developed a community plan detailing the priorities of the town moving forward. As a component of this plan the community identified a widespread desire to enhance the physical environment and improve growth opportunities in the town.

With a goal to 'work with Council to begin discussion around opportunities to improve domestic wastewater management', the community of Glenthompson identified the importance of exploring sewage options and developing a sustainable future for the township to support growth opportunities. This report provides supporting evidence for further research in this area.

2.2 Other Projects

2.2.1 Small Towns Water Quality Program

In July 2011 the Department of Sustainability and Environment in Victoria announced the fourth round of the Victorian Small Towns Water Quality Fund.

This fund was designed to assist in driving projects which identify solutions to provide improved water supply services and sewerage management for small towns (CareerSpot, 2011) and was available to water corporations and local governments to develop solutions to wastewater management issues in small towns.

This fund was ceased with a change of government and SGSC did not receive funding from this initiative, however, the availability of this regime was a driving factor in the implementation of wastewater auditing programs within the municipality. As a result of the cessation, government information was removed from web sources with the amalgamation of Department of Sustainability and Environment (DSE) and Department of Environment and Primary Industries (DEPI).

3. Methods

3.1 Stakeholder Engagement - Community

Engagement of stakeholders in the Glenthompson Township was conducted prior to the commencement of the program to ensure that the residents were informed and aware of the intention to assess all onsite wastewater management systems in Glenthompson. The format of this engagement was in written format, via information letters (Appendix 2), and a community engagement meeting on 06 April 2016, three (3) weeks prior to commencement of the inspection program.

3.1.1 Community Information Session

An opportunity was provided for residents to meet with the project team at a community information session to discuss any issues or ideas. This was held on Wednesday 06 April 2016 at the Glenthompson Recreation Reserve, in conjunction with the annual Glenthompson Community Engagement gathering. Appendix A3 illustrates the presentation provided to residents on the evening.

A number of residents attended this engagement session and provided a plethora of feedback relating to the perceptions of the community, particularly in relation to the upgrade to aerated wastewater treatment systems across the town.

The discussion generally indicated there is a concern for the health of the environment and how wastewater management may have an influence on it. There was an acceptance by many that wastewater needs to be well managed, and, if left untreated, may be detrimental to the environment.

3.2 Stakeholder Engagement – Agencies

The following agencies were contacted to discuss the objectives of Council's plans to assess the current wastewater systems across all small townships, and wastewater management in small and un-sewered communities generally. The following feedback has influenced the feasibility of wastewater management solutions for Glenthompson and other small towns across the municipality:

3.2.1 Department of Environment, Land, Water and Planning

- Current funding opportunities through DELWP have expired, and there are no sources of funding available in the short term;
 - The recently funded Department of Sustainability and Environment project – Better Practice in Domestic Wastewater Management – was successful, with outcomes through its case studies that should provide valuable strategies for regional councils and Water Authorities for management of wastewater; and
 - Future funding and assistance may be available for wastewater upgrades where the potential for environmental harm or elevated risk to public health is identified.

3.2.2 Wannon Water

Wannon Water is the regional water authority for the area including Glenthompson and carries responsibility for reticulated sewage treatment and maintenance. Despite the scope of the project falling outside the authority of Wannon Water, input was sought regarding the potential for impact on the company.

Issues for Wannon Water include: the cost to sewer small communities and network extensions that involve only a few houses; pipework to cover long distances; or where access or inadequate gradients are constraints;

- Wannon Water is responsible for water and wastewater infrastructure for any off site collection system; and
- Wannon Water understands the difficulty that small communities have, and is therefore willing to consider a range of options for wastewater management including alternative systems.

Resulting from the assessment of other small towns in the municipality, such as Penshurst and Branxholme, Southern Grampians Shire Council wrote to Managing Director of Wannon Water, Mr Andrew Jeffers, on October 23rd 2015 in support of reducing the impact in unsewered areas by providing sewerage management solutions (centralised or decentralised) in Water Plan 4 (post-2018) that unlock development potential in the townships and address environmental and public health concerns.

3.2.3 Environment Protection Authority

The EPA referred Council to published legislation and regulations and stated that it is not their role to provide policy guidance. The 2015 public inquiry into the EPA sought to identify the areas of improvement required to ensure the authority can protect public health whilst protecting the environment for future generations.

In June 2016 changes to the approval process for onsite domestic wastewater management systems were implemented by EPA. These changes led to the current requirements whereby treatment system brands and models must be certified by an accredited conformity assessment body (CAB) as conforming to the relevant AS. This accreditation is given by JAS-ANZ (the Joint Accreditation System of Australia and New Zealand). As part of a permit application to a council, applicants must include a copy of the certificate of conformity from a CAB.

3.2.4 Glenelg Hopkins Catchment Management Authority

The Glenelg Hopkins CMA was consulted in relation to their role in monitoring the health of inland waterways. Their stated position is that, with respect to water resource management, they provide a supportive and advisory role to council and stakeholders, but are not in a position to provide financial support for such a program in terms of the waterway management within the area. However, they do wish to partner in future water management initiatives.

3.3 Audit Program

Commencing 26 April 2016, SGSC appointed Environmental Health Officer, Aaron Kennett and allocated two, local, outdoor staff members to assist with the assessment of 120 designated properties within the township zone of Glenthompson. The audit program in completion resulted in the assessment of 99 of the 120 identified properties. This occurred as a result of attrition whereby a percentage of the properties within the study area were unable to be accessed and/or assessed during the set period of the program. In many cases follow-up contact with the owners of these properties shall occur to capture the data at a later date.

Utilising a pre-determined assessment criteria and inspection sheet (Appendix A4), officers attended each property over a three week period extending to 03 May 2016, completing a thorough assessment of each onsite wastewater management system for a specified criteria including;

- Tank condition
- Effluent line condition
- Pump operation (if applicable)
- Sludge depth
- EPA Code of Practice compliance
- Plumbing compliance

At the conclusion of each assessment the owner of the property is to be issued with a letter from Council specifying the compliance of the system on their land. These letters also specify the requirements and recommendations made by Council to ensure the ongoing effectiveness of the system.

As a result of Council amalgamation in 1993 the township of Glenthompson was transferred from the Shire of Mt Rouse to Southern Grampians Shire Council. During this time the transfer of information pertaining to the installation and maintenance of systems in the area failed to ensure that all relevant data was maintained in Council's record system, hence this auditing program sought to identify the location and manner of wastewater disposal infrastructure within the township. As a result the auditing program sought to ensure that each system was logged and plans filed to assist in future Council projects in the area.

4. Outcome

Over the period of the study a total of 85 systems were assessed according to the guideline assessment protocol developed by Council (Appendix A4). A proportion of systems within the study zone were unable to be assessed for a variety of reasons, including access and availability of property owners.

At the commencement of the project, Council expected a high number of non-conformances to be identified as a direct result of monitoring and compliance having not occurred in the past. With respect to this expectation the results of the audit were, whilst similar to the hypothesis, generally pleasing given the majority (58% or 57) of systems within the township of Glenthompson were compliant or require/d minor maintenance to conform to regulatory standards.

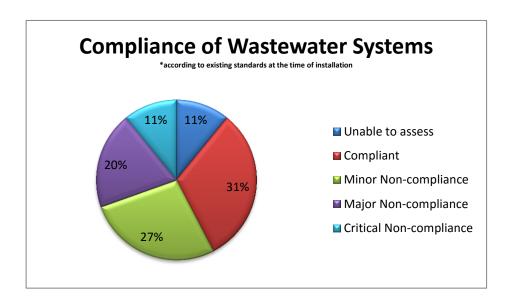


Figure 3: Compliance of Onsite Wastewater Systems

4.1 Minor Non-compliances

Minor non-conformances were classified, for the purpose of categorising varied compliance, as any works of not subject to immediate public health concern. These works include, but are not limited to;

- Structural repair of system (septic tank, grease trap or distribution pit).
- Installation and repair of e-duct vents.
- Installation of inspection risers to allow access for monitoring.
- Clearing/cleaning of effluent distribution pits.

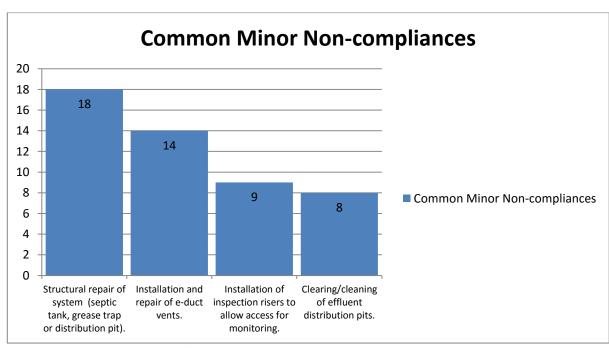


Figure 4: Common Minor Non-compliances

The assessment of systems in Glenthompson revealed a proportionately higher variation in the types of maintenance required in contrast to that experienced in previous programs conducted in Hiller Lane (Hamilton), Branxholme and Penshurst. As a result the spread of issues identified was much broader than was expected at the commencement of the program.

The presence of minor non-conformances was addressed with letters issued to each property identifying the works required to meet regulatory standards (Appendix 5). The cost of repair must be met by the property holder in cooperation with Council and any *Environment Protection Act 1970* permits applicable to the property.

4.2 Major/Critical Non-compliances

A total of 28 (31%) properties inspected were classified as having a major or critical non-compliance with their system. This classification includes any identification of an immediate risk to public health. Of the systems identified as having major non-compliance with current standards the issues identified included;

- A requirement for urgent pumping out of the system.
- Complete structural failure of the system
- Effluent (black water) disposed of via the surface of the land or to the street or roadside.

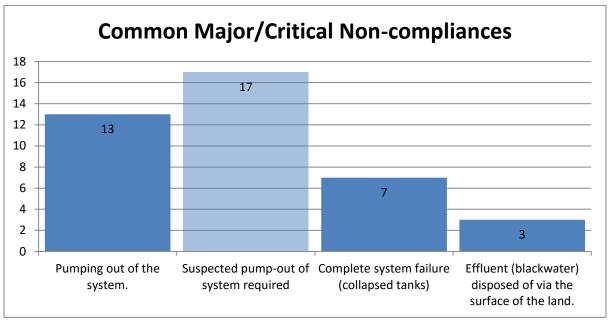


Figure 5: Common Major Non-compliances

In these cases the issues identified were considered to be of significant public health concern and were therefore issued with advice to remedy the deficiencies as soon as financially possible.

4.3 Community Education

Throughout the inspection regime Council focussed the scope of the project towards the education and provision of advice to community members responsible for the maintenance and upkeep of onsite domestic wastewater management systems in Glenthompson. In many cases the assessment of the system on a particular lot was undertaken in conjunction with the property owner/tenant to allow for discussion around the operation and maintenance of the systems in place.

Through this process information was easily obtained in relation to the frequency of regular pump-outs and the usage parameters of the system. Not only does this provide officers with technical information to assist with the risk assessment, the owner also receives advice on how to better utilise the system.

At the conclusion of the program property owners were provided with a letter detailing the legislative requirements of maintenance and repair imparted on their system. These letters were both sent to the property owners and placed on file at Southern Grampians Shire Council for future referral.

A final community meeting was held on August 3rd 2016, following the completion of data analysis and finalisation of this report, to communicate the key messages from the audit program to the members affected by the requirements.

5. Discussion and Recommendations

The scope of this project was to identify and itemise the deficiencies present in domestic onsite wastewater systems in the township of Glenthompson with a focus to advocating the role of Council in the wastewater space. There were many and varied observations made with respect to this scope and the emphasis on community education and advice was a critically important aspect of the program. Despite this, there are several areas of further research and assessment that should be undertaken by Council to fully assess and respond to the public health risk of domestic onsite wastewater management in the township.

5.1 Community Response

The residents of Glenthompson were proactive in their approach to the assessments and were key contributors to the success of the program undertaken. With respect to this, the residents of Glenthompson are strong advocates for advancement and improvement of wastewater disposal options in the town in which they live, hence rising interest in options available for wastewater management on small allotments into the future.

5.2 Recommendations and Conclusions

As a result of small allotments and restrictive ability for onsite disposal of wastewater to current legislative standards, it is in the best interest of Council to investigate the feasibility of septic inspection levies such as those implemented by Wodonga City Council to recover the cost of monitoring onsite systems to ensure continued compliance in the long term following this project.

In order to satisfactorily address the issues present both currently and into the future the following actions should be taken by Council;

- 1. Council should continue to monitor the compliance of existing systems in Glenthompson with a scope to ensure that the public health outcomes of the community are protected as far as is reasonably practicable. The results of the assessments indicate that continued monitoring and minor maintenance allows safe and contnued operation of existing systems in 58% of cases.
- 2. Due to the small allotments in the residential areas of Glenthompson and the expected soil types in the area this township is potentially a candidate for an affordable alternative to the traditional gravity sewer. Council, Wannon Water and Community should remain abreast of funding opportunities in this area and ensure that advocacy is extended to state government to support this development in the future.
- 3. Assist home owners in monitoring and maintaining their existing systems for the life of the infrastructure through community education and support to home owners.
- 4. Adequacy and location of wastewater management system tank/s and effluent area information to be submitted with Town Planning, Building and Septic Systems applications. The provided information will verify whether effluent is treated and maintained within the allotment and if the wastewater management systems maintenance will be impeded.

These outcomes are similar to those expressed in response to previous assessments in other small towns such as Branxholme and Penshurst given that the resourcing and availability of government assistance in this space is quite restrictive. The intention of the property owners in Glenthompson mirrors that of other areas in that the preference of the majority is to maintain the existing infrastructure with an open mind to the possibility of further improvements in the future, dependant on funding.

In conjunction with this further research, detailed analysis of ground water and geological parameters in the area are required to determine the most suitable options.

6. References

Building Regulations 2006 (Vic)

CareerSpot Pty Ltd 2011, Funding available for Victorian Small Towns Water Quality, viewed 17 September 2015, http://www.watercareer.com.au/archived-news/funding-available-for-victorian-small-towns-water-quality

Department of Environment, Land, Water and Planning (DELWP) 2015, *EPA inquiry begins in June*, viewed online 18 September 2015, http://delwp.vic.gov.au/news-and-announcements/epa-inquiry

Environment Protection Act 1970 (Vic)

Environment Protection Authority (Vic), 1997. *Code of Practice for Small Wastewater Treatment Plants*. East Melbourne: Victorian Government.

Environment Protection Authority (Vic), 2016. *Code of Practice - Onsite Wastewater Management*. Melbourne: Victorian Government.

Environment Protection Authority (Vic), 2002. *Guidelines for Aerated On-site Wastewater Treatment Systems*. East Melbourne: Victorian Government.

Environment Protection Authority (Vic), 2003. *State Environment Protection Policy (Waters of Victoria)*. Melbourne: Victorian Government.

Goonetilleke & Dawes 2001, 'Audit of Septic Tank Performance', School of Civil Engineering, Queensland University of Technology, viewed online 19 August 2015, http://eprints.qut.edu.au/4323/1/Audit_of_septic_tank_performance.pdf

Local Government Act 1989 (Vic)

Macedon Ranges Shire Council 2013, 'Community Update – Mount Macedon Wastewater Project', viewed online 14 August 2015, file:///C:/Users/akennett/Downloads/mount-macedon-wastewater-project-may-update.pdf

Macedon Ranges Shire Council 2015, 'Healthy, safe wastewater systems for Mount Macedon', viewed online 14 August 2015,

http://www.mrsc.vic.gov.au/Council_the_Region/News_Media/Latest_News/Healthy_safe_wastewater_systems_for_Mt_Macedon

Planning and Environment Act 1987 (Vic)

Public Health and Wellbeing Act 2008 (Vic)

Southern Grampians Shire Council 2015, *Council Report – Future of wastewater management in unsewered townships*, viewed 21 September 2015, internal document not for public viewing.

Southern Grampians Shire Council 2012, *Council Plan 2013-2017*, viewed 04 May 2015, http://www.sthgrampians.vic.gov.au/Files/Council_Plan_2013_2017.pdf

Southern Grampians Shire Council 2014, *Environmental Health Service Plan*, viewed 04 May 2015, internal document – not for public viewing.

Council, S. G. S., 2015. *Glenthompson and District Community Plan 2014-2020*. Hamilton: Southern Grampians Shire Council.

Environment Protection Authority (Vic), 1997. *Code of Practice for Small Wastewater Treatment Plants*. East Melbourne: Victorian Government.

Environment Protection Authority (Vic), 2003. *State Environment Protection Policy (Waters of Victoria)*. Melbourne: Victorian Government.

Environment Protection Authority (Vic), 2012. *Code of Practice - Onsite Wastewater Management*. Melbourne: Victorian Government.

Government of Australia, 2012. AS/NZS1547:2012 Onsite Domestic Wastewater Management. Canberra: s.n.

Government, V., 2016. *Towns in Time - Glenthompson*. [Online] Available at: https://www.data.vic.gov.au/data/dataset/towns-in-time-glenthompson [Accessed 14 April 2016].

Southern Grampians Shire Council, 2006. *Domestic Wastewater Management Plan.* Hamilton ,Victoria: s.n.

Southern Grampians Shire Council, 2014. *Southern Grampians Planning Scheme*, Hamilton: s.n.

Southern Grampians Shire Council 2013, *Penshurst Community Plan*, Southern Grampians Shire Council, Hamilton Victoria.

Southern Grampians Shire Council 2010, *Sustainability Strategy 2010-2020*, viewed 04 May 2015,

http://www.sthgrampians.vic.gov.au/Files/SGSCSustainabilityStrategyFinal.pdf

Standards Australia 2008, Australian Standard: Onsite Domestic Wastewater Treatment Units, Aerated Wastewater Treatment Systems (AS/NZS 1546.3:2008), viewed 27 June 2015.

http://www.saiglobal.com.ezproxy.cqu.edu.au/online/Script/OpenPDF.asp?DocN=AS18 69750713AT

Standards Australia 2008, *Australian Standard: Onsite Domestic Wastewater Treatment Units, Septic Tanks* (AS/NZS 1546.1:2008), viewed 27 June 2015, http://www.saiglobal.com.ezproxy.cqu.edu.au/PDFTemp/osu-2015-09-21/8124196326/1546.1-2008.pdf

Standards Australia 2008, *Australian Standard: Onsite Domestic Wastewater Treatment Units, Waterless Composting Toilets* (AS/NZS 1546.2:2008), viewed 27 June 2015,

http://www.saiglobal.com.ezproxy.cqu.edu.au/PDFTemp/osu-2015-09-21/8124196326/1546.2-2008.pdf

Standards Australia 2012, *Australian Standard: Onsite Domestic Wastewater Management* (AS/NZS 1547:2012), Standards Australia, North Sydney.

Water Act 1989 (Vic)

Whitehead & Associates Environmental Consultants Pty Ltd, 'Moorabool Shire Council Domestic Wastewater Management Plan', October 2014, viewed 19 August 2015, http://www.moorabool.vic.gov.au/CA257489001FD37D/Lookup/2014forms/\$file/Final%20DWMP-Operational%20Document%20Oct%202014.pdf

7. Appendices

A1: Community Information Letter Template

Ref: 17 March 2016

Dear Owner

NOTIFICATION OF SEPTIC TANK SYSTEM INSPECTION & COMMUNITY ENGAGEMENT GATHERING Re:

Councils in Victoria are responsible for ensuring domestic septic systems are installed and managed correctly, to avoid environmental pollution and public health issues. Southern Grampians Shire Council's Domestic Wastewater Management Plan (2006) recommends regular inspections of systems to ensure their correct operation. We have a planned program of inspections for all unsewered townships in the Shire.

Council wishes to advise that your wastewater management system (septic tank system) will be inspected by Council officers during the period 26 April 2016 to 27 May 2016.

Prior to commencing the inspection program Council will be providing information about the program at the Glenthompson community engagement gathering. Details of this event are as follows;

Location: Glenthompson Recreation Reserve

gouleneforter

2-24 Brimacombe Street Glenthompson Vic 3293

Date: 06 April 2016 **Time:** 06.00pm

At this information session Council officers will be available to discuss the scope of the audit program, common and potential issues expected to be identified and to discuss potential solutions to these issues. No individual systems or circumstances will be discussed in general; however you are most welcome to discuss your individual circumstance with Council officers in confidentiality.

It is not necessary for you to be home or present for the inspection, as the officer will leave a card notifying you that the inspection has been carried out. However, please ensure that the septic system and inspection caps are fully accessible and free from vegetation and other obstructions.

Information collected during the forthcoming septic system inspections will assist Council and the community in future decision making in relation to wastewater management in Glenthompson.

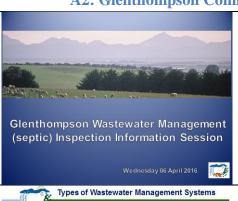
If you require any further information or wish to be present during the inspection, please contact Council's Environmental Health Coordinator, Pauline Porter on (03) 5573 0244.

Yours Sincerely

Pauline Porter

Environmental Health Coordinator

A2: Glenthompson Community Information Session Presentation





Background

- Victorian Council's are responsible for ensuring septic systems of <5000L are installed & managed correctly, to avoid environmental pollution and public health issues.
- Council's Domestic Wastewater Management Plan (2006) recommends regular inspections of systems to ensure their correct operation.
- Glenthompson Community Plan (2013) identifies community to work with council to review opportunities to improve wastewater management.
- Council has a planned program of septic inspections for all un-sewered townships in the Shire.
- Branxholme, Penshurst and Hillier Ln, Hamilton wastewater management system inspections have been completed.



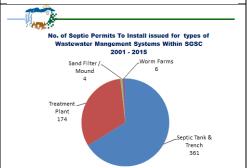
Overview

- · Types of wastewater management systems
- · Potential impacts of failing wastewater management systems
- Responsibilities
- Purpose of the wastewater (septic) inspections
- · Wastewater inspection area
- · Wastewater inspection parameters
- Further information Questions











Potential impacts of failing wastewater management systems

Human Health	Environmental	Social
Spread of disease (human & animal)	Pollution of surface water	Decreased amenity
Spread of minor illnesses	Pollution of groundwater	Odour
Harbour Vermin (mosquitoes transmit arboviruses)	Degradation of soils	Impacts on infrastructure (stormwater)
	Degradation of native vegetation	Financial for system owners
	Increased weed growth	Impact on economic development



Responsibilities

Environment Protection Act 1970

≻Council's responsibility

- Consider wastewater management matters when approving rezones, subdivisions and building construction & site plans
- · Approve Septic system installation & alteration permits
- Monitor Septic Systems to ensure they comply with permit conditions
 Ensure compliance with EPA Onsite Wastewater Management Code
- Abate nuisances caused by septic systems that have a Septic Permit

- Individual responsibility
 Obtain a Septic Permit from Council when installing & altering Septic system
- Comply with Septic Permit Conditions, Onsite Wastewater Management Code & EPA requirements
- To not pollute any waters so that the condition of the waters are harmful to public health or environment.



Responsibilities

- Public Health &Wellbeing Act 2008
- Council's responsibility
 Seek to protect, improve & promote public health
 - Remedy, as far as reasonable, all nuisances (i.e. dangerous or are liable to be dangerous to health or offensive)
 - Issue notices to persons to remedy / prevent activity which is likely or is liable to be dangerous to house
 - Take action in Magistrate Court when notices have not be complied with or the nuisances is likely to re occur

- To not cause a nuisance or knowingly, allow a nuisance emanate for any land owned or occupied
- Remedy / prevent activity which is or is liable to be dangerous to health



Purpose of Wastewater Management Systems inspections

- Assess the condition of properties' wastewater management system & capability to maintain wastewater within property boundary.
- Information collected during wastewater inspections will assist Council & community in future decision making in the management of wastewater in Glenthompson.





Please note that officers may take photos of various aspects of your system during the inspections



Wastewater Management System Inspection Area



Process

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Wastewater Inspection Parameters

- · Approximately 120 properties to be inspected within the project area.
- · Each property will be assessed for a number of parameters;
- . Structural features (e.g. septic tank lids, condition of trench & pipework)
- Physical condition (e.g. Sludge levels, stormwater management, soil type, bores) Maintaining wastewater onsite (e.g effluent entering stormwater /neighbours)
- Maintenance provision (e.g. Vegetation, sludge pump out & plumbing history)









Further Information



Questions



A3: Onsite Wastewater Audit Inspection Form Template

EXISTING ON-SITE WASTEWATER SYSTEMS INSPECTION: SEPTIC TANK



Trench / bed dimensions

Width (mm):

Date & Time of Inspection: Date of last Council Inspection: **Property Details** Property Address: Address: Lots (CA, lots, Section, PS, TP): Assessment no.: 9062 Property Area (m2): **Contact Details** Owner's Name: Postal Address: Ph: Email: **Occupiers Name:** Postal Address: Ph: Email: **System Details** ☐ Residential Use ☐ Commercial Use □Other No. of residents No. of bedrooms: Water source: ☐ Rainwater □ Dam/river □ bore ☐ Reticulated No. of tanks Tank Capacity(s) (L): ☐ Septic Tank ☐ Collection / Holding Well ☐ Pump Well ☐ Other ☐ Concrete ☐ Plastic/poly □ Fibreglass ☐ Other Permit No. / database no. GPS Cooridnates: Manufacturer / system brand: Split System ☐ Yes ☐ No Installation date: Method of application ☐ Gravity ☐ Pump ☐ Siphon Configuration ☐ Trench ☐ Absorption Bed

No. of trenches / beds/mound:

Length (mm):

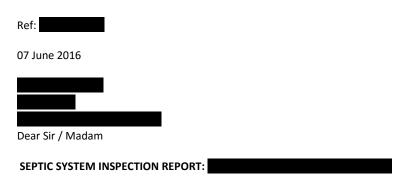
Total Length:

Depth (mm):

Gravity distribution device: ☐ Yes ☐	No	
Type: ☐ Splitter box ☐ Sequencing valve	□ drop box □	Other
Distribution System access ☐ Access box/ pit ☐ Ri	ser	Other
Disposal Area Distance from Nearest watercourse(m):	Nearest House (m):	
Does system comply with EPA Septic Code buffer distances?	☐ Yes ☐ No ☐	Unknown
General comments		
Do you need to remove vegetation around and in the tank to improve access for maintenance?	☐ Yes ☐ N	No
Is there localised flood potential?	☐ Yes ☐ No ☐	Unknown
Is there erosion potential?	☐ Yes ☐ No ☐	Unknown
System impacting on neighbours	☐ Yes ☐	□ No
Septic Tank		
Are there any gaps between the tank and the lid?	☐ Yes ☐	No
Are inspection caps, tank and lid above ground level?	☐ Yes ☐	No
Is the tank lid suitable for the tank?	☐ Yes ☐	J No
Does the tank have easily accessible inspection caps?	□ Yes □	No
Are the inspection caps present and unbroken?	☐ Yes ☐ 1	No
Has the primary septic tank been desludged in the last 3 years?	☐ Yes ☐ No ☐ Unk	known
Does the tank need desludging (is the sludge level high or near the bottom of the inlet)?	☐ Yes ☐	l No
Is any air vent attached to the septic tank / holding well in a functional state?	☐ Yes ☐ No ☐	J N/A
Is the tank in good condition (no cracks, leaks / damaged lids / walls)?	☐ Good ☐ Fair	□ Poor
Do tanks need urgent repair / replacement due to major		3 M
structural failure or undersizing? Has the outlet filter been cleaned recently?	☐ Yes ☐ No ☐ N	J No
Crust	Odour	□ Yes □ No
Sludge depth	Desludge needed	☐ Yes ☐ No
Inlet/outlet junctions clear	Good biological activity	☐ Yes ☐ No
General condition of tank	☐ Good ☐ Fair 1	
Pumps / Electrical Components	5 3000 B 1 mi	3 1001
Does the pump operate when needed? (trigger the float		
switches to check operation)		N/A
Does the alarm work		J N/A
Has the pump been serviced in the last 12 months?	☐ Yes ☐ No ☐ No	
Presence of sludge in pump well	☐ Yes ☐ No ☐	N/A
Pipes		
Are the pipes connecting the septic tank, pump well and/or		
holding well, or septic tank and trench, functioning and installed correctly?	☐ Yes ☐ No	□ Unknown
Are there any unsealed pipes that allow untreated		
wastewater to escape?	☐ Yes ☐ No ☐	Unknown
Are there any pipes allowing untreated wastewater/		Unknown

Trench / bed		
Is the dosing siphon or splitter box working properly and not blo	ocked or clogged?	
Evidence of physical damage (eg: digging, erosion)	☐ Yes ☐ No	
Is there evidence of vehicle, human or animal traffic over		
Is there evidence of maintained protective measures to prevent to		
Trenches follow contours	☐ Yes ☐ No ☐ Unknown	
Presence of surface ponding / toe leaching / seepage	☐ Yes ☐ No	
Are some trenches / bed greener than others,	☐ Yes ☐ No	
if yes identify trenches		
Excess weed growth on trench and in the area	☐ Yes ☐ No	
Incomplete or inappropriate vegetation cover	☐ Yes ☐ No	
Inspection port interiors clear and in good condition	☐ Yes ☐ No ☐ N/A	
Comments, action or repairs needed:		
Map of Site & System		
Nome / Title of Ingresters		
Name / Title of Inspector:		
Signature:	Date:	
-g-mviii VI		

A4: Resident Inspection Report Letter Template – Compliant



An inspection of your septic tank system was carried out recently during the planned inspection program undertaken by Southern Grampians Shire Council. The program investigated current wastewater management of properties within the township zone of Glenthompson. It identified septic system defects that will need to be rectified according to government regulations and legislation.

At your premises at which the time of installation and does not currently pose a public health threat; therefore you do not need to take any remedial action at this time. To ensure ongoing compliance of the system please continue to monitor and maintain your system as required.

A community meeting will be held at 7.30pm on Wednesday 3rd August 2016 at the Glenthompson Community Hall, 13 McLennan Street, Glenthompson to discuss the outcomes of the inspection program. Please be advised that no individual circumstances will be discussed at this meeting. If you wish to discuss your individual circumstances an appointment can be made to speak to Council officers by calling on the following details.

We thank you for your cooperation. If you require any further information, please contact Council's Environmental Health Department staff, Pauline Porter on (03) 5573 0244 or Aaron Kennett on (03) 5573 0245.

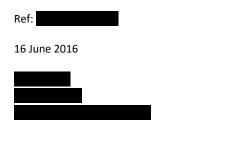
Yours Sincerely

Pauline Porter

Environmental Health Coordinator

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A5: Resident Inspection Report Letter Template – Minor/Major Non-Compliance



Dear Sir / Madam

SEPTIC SYSTEM INSPECTION REPORT AND COMMUNITY MEETING:

Council wishes to advise that an inspection of your wastewater management system (septic tank system), was carried out during the planned Glenthompson wastewater system inspection program carried out in April and May 2016.

The wastewater inspection program was undertaken as per Southern Grampians Shire Council's Domestic Wastewater Management Plan (2006). The Glenthompson wastewater inspection program investigated current wastewater management of properties and identified septic system defects that may threaten public health and the environment.

An inspection of your wastewater management system identified the following deficiencies which require maintenance and/or repairs to be carried out on your properties wastewater system to avoid your system causing environmental pollution and public health issues now and to the future;



Once the works have been completed, please supply confirmation to Council. Suitable information would include a copy of an account, receipt or declaration from the tradesperson who carried out the required works. Failure to address the works may see Council take further action.

A community meeting will be held at **7.30pm on Wednesday 3rd August 2016** at the **Glenthompson Community Hall, 13 McLennan Street, Glenthompson** to discuss the outcomes of the inspection program. Please be advised that no individual circumstances will be discussed at this meeting. If you wish to discuss your individual circumstances an appointment can be made to speak to Council officers by calling on the following details.

Should you require any assistance in understanding this inspection report or you require any further information, please contact Council's Environmental Health Department staff, Pauline Porter on (03) 5573 0244 or Aaron Kennett on (03) 5573 0245

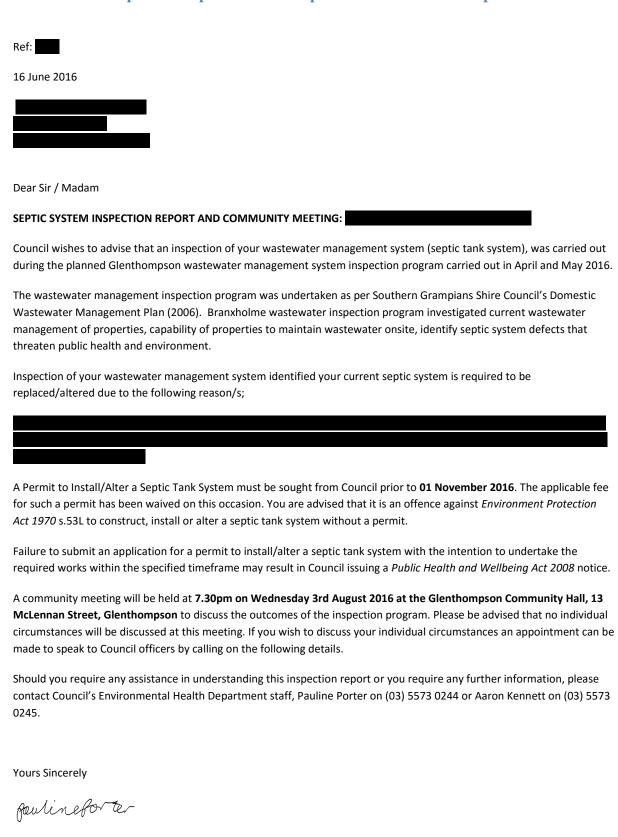
Yours Sincerely

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Pauline Porter

Environmental Health Coordinator

A6: Resident Inspection Report Letter Template – Critical Non-Compliance



Pauline Porter Environmental Health Coordinator

A6: Property Inspection Results Spreadsheet Data

Assessment_Number	Compliance	Works Required
		1. The effluent trench/es currently in use is damaged and there is evidence of effluent ponding on the surface of the land along the length of the trench. The effluent disposal trench/es require/s replacement to ensure correct operation of the system and reduce the risk to public health posed by the failing trench/es. An 'Application for a Permit to Install/Alter a Septic Tank System' must be lodged with all required documentation prior to commencement of works.
8850	Critical Non-compliance	The distribution pit at the commencement of the wastwater trench/es requires cleaning to remove an accumulation of roots, soil and/or other solid matter.
0050	Chical Non-complaints	3. The vent pipe at the side of the dwelling requires extension to ensure the vented gases are released above the roofline of the dwelling.
		4. The vent pipe at the rear of the outdoor toilet is damaged and, if required, should be replaced to ensure appropriate venting prior to the septic tank.
		5. Pump-out the septic tank to ensure the is no excessive accumulation of scum.
8796	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8749	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8753	Critical Non-compliance	1. Greywater from the premises is entering and stagnating in the roadside drain in Walter Street, causing odour and amenity issues in the vicinity of the premises. All wastewater from the premises must be disposed of via an approved, onsite system and must not cause nuisance to the neighbouring properties. The greywater must be rediverted to an approved wastewater treatment and disposal system to reduce the amenity issue in the neghbourhood. An 'Application for a Permit to Install/Alter a Septic Tank System' must be lodged with all required documentation prior to commencment of works.
		2. The distribution pit at the commencement of the wastwater trench/es requires cleaning to remove an accumulation of roots, soil and/or other solid matter.
8844	Minor Non-compliance	1. Ensure that the gaps between the septic tank and lids are sealed to prevent odour and mosquito breeding in the wastewater system.

		1. The distribution pit at the commencement of the wastwater trench/es requires cleaning to remove an accumulation of roots, soil and/or other solid matter.
8771	Minor Non-compliance	2. The septic tank does not have a scum layer on the surface of the waste. Ensure that T-pipes are fitted and in good condition at the inlet and outlet points of the tank to allow the system to function effectively.
		3. During the inspection it was unclear when the system was last pumped out. A pump out may be required to ensure that the accumulation of sludge in the tank does not interfere with the outlet or the effluent disposal area.
		4. Fit a cap on the e-duct vent to ensure that mosquitoes are prevented from entering and breeding in the system.
		1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected
8800	Compliant	from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
3333	Сотрист	2. The distribution pit at the commencement of the wastwater trench/es requires cleaning to remove an accumulation of roots, soil and/or other solid matter.
		1. Pump-out the septic tank to ensure the is no excessive accumulation of scum.
8765	Major Non-compliance	2. The lids on the septic tank are worn and may require replacement in the near future.
		3. Ensure that the gaps between the septic tank and lids are sealed to prevent odour and mosquito breeding in the wastewater system.
		1. Ensure that the gaps between the septic tank and lids are sealed to prevent odour and mosquito breeding in the wastewater system.
8794	Compliant	2. Ensure the distribution pit at the commencement of the trench/es is clear of debris and other solid matter.
		3. Fit mesh to the vent pipe at the sewage outfall to prevent mosquitoes entering and breeding in the system.
		1. During the inspection Council officers were advised that the septic tank outfall is directed to the underground stormwater
8808	Critical Non-compliance	pipe servicing the property from the roadside. Effluent must be disposed of via an approved subsurface method to prevent
	,	contamination of the environment and protect public health.
		1. Install a new lid on the greywater grease trap to prevent odour and extraneous matter entering the system.
10166	Minor Non-compliance	2. Repair the septic tank lid to ensure that any gaps are sealed to prevent odour and extraneous matter entering the system.
		3. Repair the vent pipe at the sewage outfall to prevent mosquitoes and other vermin entering the system.
		1. Repair the septic tank to ensure the lids and inspection outlets are in good working order at all times to prevent amenity
8822	Major Non-compliance	issues and ensure the system is maintained in a condition whereby effective operation can be maintained.
		2. Install a vent pipe at the sewage outfall from the dwelling to ensure gases are appropriately vented prior to the septic tank.
8824	Critical Non-compliance	1. The septic tank side-wall has collapsed and is no longer capable of holding and treating effluent to a suitable standard.

8772	Compliant	1. The septic tank system is located below the pavers at the rear of the dwelling and is marked by a variation in colour of the pavers on the top of the system. Ensure that access to the septic tank and associated inspection pits is maintained at all times to allow access for inspection and maintenance.
9514	Unable to assess	1. During the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide Council details of the location and size/s of the septic tank and effluent disposal trenches.
8802	Major Non-compliance	 Pump-out the septic tank to ensure the is no excessive accumulation of scum. Ensure that all pipes connected to and from the wastewater system are sealed to prevent leakage prior to the trench/es.
8833	Compliant	No issues identified.
10164	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
10161	Critical Non-compliance	1. The septic tank side-wall has collapsed and is no longer capable of holding and treating effluent to a suitable standard.
8826	Unable to assess	1. The septic tank located by Council officers was backfilled with soil and therefore assumed to be decommissioned. Please provide Council details of the location and size/s of the septic tank and effluent disposal trenches.
8786	Major Non-compliance	1. Seal the gap/s between the septic tank and lids to prevent vermin, mosquitoes and other extraneous matter entering the system.
		2. Pump-out the septic tank to ensure the is no excessive accumulation of scum.
8797	Minor Non-compliance	1. During the inspection Council officers were unable to access the septic tank for inspection. Uncover the septic tank or install risers on the inspection outlets to allow future access for maintenance and monitoring of the system.
		The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8845	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8801	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8789	Major Non-compliance	1. Pump-out the septic tank to ensure the is no excessive accumulation of scum. Council officers were advised that the system had not been pumped in known memory.
8827	Compliant	1. Fit a cap/mesh on the vent pipe to prevent mosquitoes from entering and breeding in the system.
8795	Minor Non-compliance	1. Install a new vent pipe with mesh to prevent mosquitoes from entering and breeding in the system.
8832	Major Non-compliance	 Pump-out the septic tank to ensure the is no excessive accumulation of scum. Clean the distibution pit at the commencement of the trench/es to remove sludge and other solid matter.
		3. Locate the septic tank and install risers on the inspection outlets to allow access for maintenance and monitoring.
8831	Compliant	No issues identified.

		1. Repair the wastewater pipes at the outfall from the dwelling to ensure they are sealed and operating as intended.
8829	Major Non-compliance	2. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the engine effective energing
		from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8837	Minor Non-compliance	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
		2. Fit a cap/mesh on the vent pipe to prevent mosquitoes from entering and breeding in the system.
8825	Major Non-compliance	1. Pump-out the septic tank to ensure the is no excessive accumulation of scum.
		2. Fit a cap/mesh on the vent pipe to prevent mosquitoes from entering and breeding in the system.
8764	Minor Non-compliance	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
		2. Fit a cap/mesh on the vent pipe to prevent mosquitoes from entering and breeding in the system.
		1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected
		from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8751	Major Non-compliance	2. Clean the grease trap and distribution pits to remove sludge and other solid matter.
		3. Install risers on the inspection outlets of the septic tank to allow access for maintenance and monitoring of the system.
8770	Compliant	1. Clean the distribution pits of the septic tank system to remove sludge and other solid matter.
		1. Pump-out the septic tank to ensure the is no excessive accumulation of scum.
8804	Major Non-compliance	The effluent lines may be damaged from accumulated sludge entering the disposal trench/es. Council officers were advised that the system had been backing up and therefore a plumber is required to conduct maintenance on the system to rectify the cause.
8778	Minor Non-compliance	1. Repair the minor cracks in the septic tank mortar to ensure that the structural integrity of the tank is protected.
8806	Compliant	No issues identified.
8849	Unable to assess	1. During the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide Council details of the location and size/s of the septic tank and effluent disposal trenches.
		1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8798	Minor Non-compliance	2. Ensure the T-pipes at the inlet and outlet of the tank are in good working condition to protect the trench/es from sludge an damage.
		3. Replace the timber lid on the septic tank with a suitable, sealed, concrete lid.
		4. Fit a mesh cap on the vent pipe to prevent mosquitoes entering the system.

8816	Minor Non-compliance	1. Seal the gaps between the septic tank and lids (including the mortar in the side wall of the tank) to prevent odour and mosquitoes.
8814	Minor Non-compliance	1. Repair the damaged septic tank lid/s and distribution pits to ensure the system is sealed and free of vermin and mosquitoes.
		Ensure the pump is serviced regularly to maintain the system in good working order.
11322	Unable to assess	1. During the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide
11322	Ollable to assess	Council details of the location and size/s of the septic tank and effluent disposal trenches.
8805	Compliant	No issues identified.
		1. Install T-pipes at the inlet and outlet of the tank to allow effective bilogical activity and protect the trench/es from sludge and damage.
8809	Minor Non-compliance	2. Fit mesh on the vent pipe to prevent mosquitoes entering the system.
		3. Seal the gaps between the septic tank and lids (including the mortar in the side wall of the tank) to prevent odour and mosquitoes.
		1. Fit mesh on the vent pipe to prevent mosquitoes entering the system.
8784	Compliant	
		2. Clean the distribution pit at the commencement of the trench to remove sludge and to protect the system from damage.
		1. The sturctural integrity of the tank is to be checked by a plumber to ensure that the system is in sound condition and not
0772	Nation Nov. compliance	leaking. The mortar at the side of the tank is heavily worn.
8773	Major Non-compliance	2. The continuous system should be numbed out if not done in the past F years to ensure that the transh /or are protected
		The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
10169	Compliant	No issues identified.
8776	Compliant	I. Install an overflow relief gully to prevent blockages backing up inside the house.
0770	•	During the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide
8812	Unable to assess	Council details of the location and size/s of the septic tank and effluent disposal trenches.
		1. Repair the broken grease trap lids, clean the pit to remove sludge and ensure that all baffles are present and in good working
		order.
8818	Major Non-compliance	
		2. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected
		from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8838	Critical Non-compliance	1. The septic tank side-wall has collapsed and is no longer capable of holding and treating effluent to a suitable standard.
8813	Unable to assess	1. During the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide
0013	Olianie (O 922622	Council details of the location and size/s of the septic tank and effluent disposal trenches.
		1. Clean the grease trap to remove the accumulation of fat/grease.
10160	Compliant	
		2. Ensure the lids of the septic tank are sealed to prevent mosquitoes entering the system.

		1. The bacterial activity of the system is inefficient and requires boosting to ensure the system treats wastewater correctly. This may be done by addition of an enzyme or other method of bacterial loading.
8781	Minor Non-compliance	2. Fit mesh on the vent pipe to prevent mosquitoes entering the system.
		3. Clean the distribution pit at the commencement of the effluent trench/es to remove the accumulation of sludge and other solid matter.
8780	Critical Non-compliance	1. The septic tank side-wall has collapsed and is no longer capable of holding and treating effluent to a suitable standard.
8807	Critical Non-compliance	 The septic tank side-wall has collapsed and is no longer capable of holding and treating effluent to a suitable standard. The effluent trench is exposed in sections and officers were advised that the trench tends to pond at the end of the lines. The trench requires replacement to ensure that all effluent is efficiently disposed of via sub-surface methods and to prevent risk to public health.
8817	Compliant	No issues identified.
8750	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
11142	Minor Non-compliance	 Ensure that the vent on the septic tank lid is sealed off to allow the system to operate to best efficiency and prevent odours. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8828	Minor Non-compliance	 Ensure that the pump in the pump well is serviced regularly to ensure it is operational when required. The septic tank must remain uncovered and free of excess vegetation to allow access for maintenance and monitoring.
10171	Compliant	2. The septile tank must remain uncovered and free of excess vegetation to allow decess for maintenance and monitoring.
8811	Major Non-compliance	 The trenches are presently located on the neighbouring property. If/when the system is replaced the septic tank and trenches must be relocated to the same title as the dwelling. The effluent trenches must be protected from stock, including cattle, sheep and horses, at all times to protect the system from damage.
		3. Replace the damaged vent pipe to ensure adequate ventilation of the system and to prevent mosquitoes entering and breeding in the septic tank.
8759	Unable to assess	1. During the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide Council details of the location and size/s of the septic tank and effluent disposal trenches.
		1. Uncover the septic tank or install risers on the inspection outlets of the tank to allow access for maintenance and monitoring of the system.
8835	Minor Non-compliance	2. Replace the damaged distribution pit lids at the commencement of the trenches.

1. Pump-out the septic tank to ensure the is no excessive accumulation of scum. 2. Install risers over the inspection outlets of the septic tank to allow access for maintenance and monitoring of the system. 3. Unrower the septic tank or install risers on the inspection outlets of the tank to allow access for maintenance and monitoring of the system. 3. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system. 3. The septic tank is vertically a state trenches to allow access for maintenance and monitoring of the system. 3. Unable to assess 3. Unable to assess 4. Dunable to assess 4. Dunable to assess 5. Clean the distribution pits at the commencement of the trenches to remove accumulated sludge and other solid matter. 4. Duning the inspection Council officers were unable to locate the Septic Tank and effluent disposal area. Please provide Council details of the location and size/s of the septic tank septiment disposal area. Please provide Council details of the location and size/s of the septic tank septem disposal prenches. 4. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the tench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system. 4. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the tench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system. 5. The septic tank is protected from wellcular access to reduce the risk of damage to the system. 6. The septic tank is protected from wellcular access to reduce the risk of damage to the system. 6. The septic tank system has been filled with scoria and is not in operational condition. The system is required to be either replaced to meet standards o			
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8799	Unable to assess	1. At the time of the inspection Council officers were unable to access the septic tank for assessment. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8752	Minor Non-compliance	 Uncover the septic tank and/or install risers on the inspection outlets of the tank to allow access for maintenance and monitoring at all times. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8754	Minor Non-compliance	 The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system. Ensure that the grease trap/s are cleaned and all baffles are in place and working correctly.
8787	Minor Non-compliance	Uncover the septic tank and/or install risers on the inspection outlets of the tank to allow access for maintenance and monitoring at all times.
8823	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
8820	Compliant	1. Septic tank is almost empty.
8760	Major Non-compliance	 Replace the damaged septic tank lid to ensure the system is maintained in good working order and to prevent odour/mosquitoes. Pump-out the septic tank system to remove the accumulation of sludge and solid matter. The tank was full at the time of inspection which may indicate blocked or damaged trench/es.
8762	Major Non-compliance	 Clear the excess lawn/vegetation around the septic tank to allow access for maintenance and monitoring. Pump out the septic tank to remove accumulated sludge and solid matter. Officers were advised that the system had not been pumped out for 20+ years.
8790	Minor Non-compliance	 Ensure the distribution pit at the commencement of the trench/es is cleaned and free of sludge or other solid matter. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system. Repair/replace the rusted vent pipe to ensure the system is adequately ventilated and to prevent mosquitoes entering and breeding in the system.
8843	Compliant	 Seal the septic tank lids to prevent mosquitoes entering and breeding in the system, Clean the distribution box to remove solid matter.
10167	Unable to assess	1. At the time of the inspection Council officers were unable to access the septic tank for assessment. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.

8785	Minor Non-compliance	1. Seal the gaps between the septic tank and lids (including the mortar in the side wall of the tank) to prevent odour and mosquitoes.
8767	Compliant	1. The septic tank system should be pumped out, if not done in the past 5 years, to ensure that the trench/es are protected from damage caused by excessive sludge in the system and to ensure the ongoing effective operation of the system.
10162	Critical Non-compliance	1. During assessment it was determined that a shower has been installed in the small 'garden shed' at the rear of the property. Council's records indicate that the shower was installed between 2013 and 2015 and therefore is subject to current <i>EPA Code of Practice Wastewater Management (891.3)</i> . In accordance with this code of practice the shower, and associated wastewater, must be connected to an approved onsite wastewater system. An 'Application for a Permit to Install/Alter a Septic Tank System' must be lodged to Council with all required documentation and the facilities onsite must be connected to an approved system.
8811	Compliant	1. Septic tank pumped within the last 12 months.
8817	Minor Non-compliance	1. Clean the distribution pits of the septic tank system to remove sludge and other solid matter.
8779	Compliant	1. Septic tank and grease traps are empty.