

# Shire of Ravensthorpe

Water Operating Licence Audit and Asset Management Review

**Final Report** 

October 2009



INFRASTRUCTURE | MINING & INDUSTRY | DEFENCE | PROPERTY & BUILDINGS | ENVIRONMENT

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# **Executive Summary**

This Operating Licence audit and Asset Management System review was carried out on the water services (sewerage) for the Shire of Ravensthorpe (the Shire) for the period between 1<sup>st</sup> December 2005 and 30<sup>th</sup> November 2008 in accordance with the approved Audit Plan and the Audit Guidelines of the Economic Regulation Authority. The purpose of this audit was to assess the Shire's level of compliance with the conditions of its licence for Non-Potable Water Supply and Sewerage Services.

Ravensthorpe is a small town located approximately 536 kilometres south east of Perth and has a population of approximately 600. The Water Services includes the operations and maintenance of:

- Approximately 10.0kms of sewer collection system
- A pump station
- Pressure main
- Wastewater Treatment Plant (WWTP) which collects and treats approximately 34ML per annum of the residential and commercial wastewater.
- Effluent Reuse Scheme which treats and disposes of 18ML per annum of treated wastewater by disinfection and reticulated to the sports oval.

The last audit was completed by SMEC in January 2006 for the period 1<sup>st</sup> December 2002 to 30<sup>th</sup> November 2005. Unfortunately, copies of this audit report and the previous audit report by Aquaterra for 1999 to 2000 were not available to the GHD auditor prior to or during the site inspection and the review of the previous audit was completed on the 2000 Audit report by SMEC. The auditor identified issues and made recommendations with regard to the Shire's compliance with the conditions of its licence. The previous audit was reviewed and some improvement has occurred since the previous audit and review. A summary of the status of the previous audits issues and recommendations are shown in Tables 3 and 4 in Section 2 of this report.

A GHD audit team carried out the audit/review including a field visit and a review of documentation, systems and operations.

The wastewater infrastructure is generally in good condition, operated effectively and is well maintained. The scheme performs to an acceptable level and within operational requirements of the Licence. The assets included:

- Pump Station in Queen Street;
- Reticulation 10.0km and pressure main 0.6km;
- Wastewater Treatment Plant (WWTP) Pond system; and
- Effluent reuse pump station, storage tanks, chlorination unit and irrigation system.

Documentation of the "As Constructed" status of the systems has been captured.

Operations and maintenance manuals and contingency management plans are not available for any of the infrastructure.

The town's sewage demand profile has been stable in recent years. Growth is not predicted during the next five year period. The WWTP has adequate capacity to meet the town's requirements. A summary of the operational audit issues and recommendations are shown in Table (i).

Licence Condition	Non-compliance issue	Recommended action	Action Plan
Asset management system - Clause 6: (a) The Licensee is to: (i) provide for an asset management system in respect of the Licensee's Water Service Assets;	The Asset Management Plan and asset register system are current. The system does not include capture of historical activities and tasks.	Implement an AMIS to capture historical asset performance and cost information, and completed tasks and activities.	Recommended action has been identified in the post-audit Implementation Plan for action by the Environmental Health Officer prior to 30 June 2010.
(ii) notify details of the system and any changes to it to the Authority, and	The revised AMP has not been forwarded to the Authority.	Forward a copy of the revised AMP to the Authority.	Recommended action has been identified in the post-audit Implementation Plan for action by the Environmental Health Officer prior to 30 June 2010.
Specified information to be provided - Clause 14: (c) The Licensee shall report the information set out in Schedule 3. The reports are due within 30 days of the end of each financial year.	The Shire did not have a record of submitting the reports.	Develop and implement a data collecting procedure for information required by Schedule 5 of the new licence and ensure information is submitted to Authority by the required date.	Recommended action has been identified in the post-audit Implementation Plan for action by the Environmental Health Officer prior to 30 June 2010.
Performance of functions by the Licensee - Clause 15. (a) The Licensee shall comply with the quality and performance standards set out in Schedule 2.	Services have been provided in accordance with the performance and quality KPIs. Need documentation to verify compliance.	Shire to complete Schedule 5 of the new Licence annually by the due date.	Recommended action has been identified in the post-audit Implementation Plan for action by the Environmental Health Officer prior to 30 June 2010.

Table (i) Operating Licence Requirements - Summary of Current Issues and Recommendations
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Licence Condition	Non-compliance issue	Recommended action	Action Plan
Customer Service Charter Clause 19: g) The Licensee must make the Customer Service Charter available to its Customers in the following ways: (i) by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access; (ii) by providing a copy, upon request, and at no charge, to a Customer; and (iii) by advising Customers of the availability of the Customer Service Charter on an annual basis.	Copies are not available on request at the Reception counter. The Charter is not displayed in the reception area. Customers are not advised of the availability of the Charter.	Ensure copies of the Customer Service Charter (CSC) are available to customers upon request at Reception, display the CSC on the Shire's notice board and advise Customers annually of the CSC availability.	Recommended action has been identified in the post-audit Implementation Plan for action by the CEO prior to 30 June 2010.

The Asset Management System, although reasonably basic, is understood by the staff and generally suitable for the scheme. The Asset Management Plan is reasonably comprehensive and includes most of the sections and information required by the Authority.

The Shire does not have an Asset Management Software System and past activities are not recorded in a central repository. The time spent on maintenance and operations of infrastructure components are captured on timesheets. While the current system provide a basic maintenance management capability, the Shire does not have an asset performance predictive capability or records of historical activities and costs desirable in an Asset Management System as detailed in the International Infrastructure Management Manual. A summary of the Asset Management System review issues and recommendations are shown in Table (ii).



Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
Asset Planning	Lifecycle costs of owning and operating assets are assessed	Lifecycle costs are covered at summary level in the AMP. Costs of individual assets have not been assessed	Complete lifecycle costs for all assets and include in the AMP.	The objectives and lifecycle costs for all assets and will be identified and documented include in AMP by 30 Sept 2010
	Plans are regularly reviewed and updated	Only recently updated, but irregularly reviewed in the past.	Create and implement review procedure for asset plans. Incorporate a reminding mechanism in procedure.	A notation will be placed in the Council corporate calendar for asset plans to be assessed and if necessary reviewed in August of each year.
Asset Creation and Acquisition	Evaluations include all life- cycle costs	The AMP does not adequately address the process of asset lifecycle cost evaluation.	Identify and document asset objectives and lifecycle costs for all assets and include in AMP.	The objectives and lifecycle costs for all assets and will be identified and documented include in AMP by 30 Sept 2010
Environmental Analysis	Opportunities and threats in the system environment are assessed	AMP does not include SWOT analysis, but understood and informally evaluated by staff.	Identify, document and assess opportunities and threats. Include in AMP.	A SWOT is already in place. This is part of the nutrient management plan that has been submitted to Department of Environment and Conservation as part of its licensing requirements.
				This will be expanded to include the entire system by 30 June 2010

Table (ii) Asset Management System Requirements - Summary of Current Issues and Recommendations

Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	Detailed in the Levels of Service section of the AMP. Performance is not measured or evaluated.	Establish a system for measuring and recording performance standards.	A system for measuring and recording performance standards will be implemented by 30 June 2010.
Asset Operations	Operational policies and procedures are documented and linked to service levels required	Safety policies and procedures prescribed in AMP. Operational policies and procedures have not been documented or linked to the service levels.	Document operational policies and procedures with linkages to the Service Levels.	A "WASTEWATER OPERATIONAL AND MAINTENANCE MANUAL" exists but was not identified by the auditor. This will be expanded to cover all parts of the system including operational policies and procedures with linkages to the Service Levels by 30 June 2010.
Asset Maintenance	Maintenance policies and procedures are documented and linked to service levels required	Maintenance policies and procedures have not been developed.	Create and document policies linked to maintenance procedures and service levels for assets.	A "WASTEWATER OPERATIONAL AND MAINTENANCE MANUAL" exists but was not identified by the auditor. This will be expanded to cover all parts of the system by Dec 2010.
	Regular inspections are undertaken of asset performance and condition	Regular inspection and conducted, but records are not kept to verify tasks have been completed.	Expand the maintenance schedule to include procedures for recording maintenance tasks, performance and condition. Include in AMP.	This already exists in the "WASTEWATER OPERATIONAL AND MAINTENANCE MANUAL" but was not identified by the auditor. This will be expanded to cover all parts of the system by Dec 2010.

Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	A maintenance schedule has been created, but not implemented.	Identify and document maintenance requirements (emergency, corrective and preventative) for assets and create and implement maintenance plans. Include in AMP.	This already exists in the "WASTEWATER OPERATIONAL AND MAINTENANCE MANUAL" but was not identified by the auditor. This will be expanded to cover all parts of the system by 30 Sept 2010.
Asset Management Information System	Adequate system documentation for users and IT operators	The Shire does not have an AMIS.	Create and implement review procedure for AMIS and include in AMP.	This will be addressed by filing all correspondence into Council's recently installed synergy soft electronic records system and the creation of separate hard files in Council's records system.
				Immediate
				An AMIS plan will also be prepared by 30 Sept 2010.
	Input controls include appropriate verification and validation of data entered into the system	The Shire does not have an AMIS.	Create and implement review procedure for data verification procedure and include in AMP.	Quality of DATA input will be controlled by allocating tasks to specific people who only have access to that part of the computer system and or records system.
				An AMIS will be written by July 2010 and implemented by 30 Sept 2010.
	Logical security access controls appear adequate, such as passwords	The Shire does not have an AMIS.	Ensure Asset Management Information System can only be accessed by authorised persons.	An AMIS will be written by July 2010 and implemented by 30 Sept 2010.

Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
	Physical security access controls appear adequate	The Shire does not have an AMIS.	Ensure adequate physical security access controls such as swipe cards are implemented	Physical security access is already controlled by the usage keypad entry locks.
	Data backup procedures appear adequate	The Shire does not have an AMIS.	Create and implement backup procedure for asset data.	Data is already backed up regularly as part of Council's normal business practices.
	Key computations related to licensee performance reporting are materially accurate	The Shire does not have an AMIS.	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.	A system of internal three monthly reporting is to implemented to ensure that the data used for Key computations related to licensee performance reporting is materially accurate 30 June 2010
	Management reports appear adequate for the licensee to monitor licence obligations	The Shire does not have an AMIS.	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.	A system of internal three monthly reporting is to implemented to ensure that the data used for Key computations related to licensee performance reporting is materially accurate 30 June 2010
Risk Management	Risk management policies and procedures exist and are being applied to minimise	Risk evaluated and documented in the AMP. Specific policies or	Create risk management procedures and policies to be included in AMP.	Risk management procedures and policies will be included in the AMP 30 June 2010.
	internal and external risks associated with the asset management system	procedures for the sewerage system have not been developed.	Ensure policy includes risk reviewing procedure.	A notation will be placed in the Council corporate calendar for the risk management procedures and policies included in the AMP to be assessed and if necessary reviewed in August of each year.

Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
	Risks are documented in a risk register and treatment plans are actioned and monitored	Risks are documented in the AMP. The action plan has not been actioned or monitored.	Action current risks identified in AMP and create procedure for monitoring.	A system of internal three monthly reporting is to be implemented to ensure that risks monitored and documented. 30 June 2010
Review of Asset Management System	A review process is in place to ensure that the asset management plan and the asset management system	sure that the asset procedures for sewer agement plan and the management system existing AMP.	Create asset management review procedure to ensure system is reviewed regularly. Expand and implement existing	This already exists in the "WASTEWATER OPERATIONAL AND MAINTENANCE MANUAL" but was not identified by the auditor. This will be expanded to cover all
	described therein are kept current	The Shire needs to implement an annual	AMP to include manuals, policies and procedures for sewer	parts of the system by 30 June 2010. A notation will be placed in the Council
		review process/ procedure to ensure the AMP and AMS are kept current.	system.	corporate calendar for asset plans to be assessed and if necessary reviewed in August of each year.



The outcome of the inspection of the water services documentation and interviews with the Shire staff was that the sewerage system is operated effectively, within the current standards and code requirements and present minimal risks to the customers and residents. While, the level of documentation and management systems is very basic, these are generally adequate for the number and complexity of the water services assets.

The Shire has no growth and planned refurbishment/replacement of assets has not been required. Some improvements of the pipeline network are planned to address tree root intrusions.

Overall the Shire's operation of the Water Services Licence is compliant with major or material requirements of the Licence. Recommendations have been provided to improve the strength of internal controls to maintain compliance. The primary deficiencies with the operation of the Water Services Licence are the auditing of the asset management system, reporting to the Authority, and availability of the customer service charter.

The primary deficiencies with the Shire's Asset Management System are in the areas procedures for asset operations and maintenance, and threats and opportunities of the system environment.

# 1. Introduction

This Operating Licence audit and Asset Management System review was carried out on the water services (sewerage) for the Shire of Ravensthorpe (the Shire) for the period between 1<sup>st</sup> December 2005 and 30<sup>th</sup> November 2008 in accordance with the approved Audit Plan and the Audit Guidelines of the Economic Regulation Authority. The purpose of this audit was to assess the Shire's level of compliance with the conditions of its licence for Non-Potable Water Supply and Sewerage Services.

Ravensthorpe is a small town located approximately 536 kilometres south east of Perth and has a population of approximately 600. The Water Services include the operations and maintenance of:

- Approximately 10.0kms of gravity collection mains
- A pump station
- Pressure main;
- Wastewater Treatment Plant (WWTP) which collects and treats approximately 34ML per annum of the residential and commercial wastewater.
- Effluent Reuse scheme with disinfects 18ML per annum of treated wastewater and reticulates to the sports oval.

The scope of services and licence compliance requirements are detailed in the Shire's Operating Licence, Licence Registration Number IL/26, Licence Version 4 dated 6 July 2005. As an amended Licence was issued towards the end of the audit period on 6 August 2008, the older Licence was used as the basis of the audit and review. This audit and review has been prepared in accordance with "The Economic Regulation Authority (the Authority), Audit Guidelines: Electricity, Gas and Water Licences September 2006.

### 1.1 Scope

The Audit covers the period 1 December 2005 to 30 November 2008. As it is impractical to review all relevant documents and data for this period, a sample of documents and services/events were examined in order to establish a thorough appreciation of the performance, and assess compliance.

The methodology, order and content of the audit was:

- Review of previous audit documentation and results;
- Review of Licence Documentation, Asset Management systems, plans etc;
- Interview with relevant personnel; and
- Preparation of draft and final report.

### 1.2 Documents Reviewed

The following documents, which relate to the water services operations and asset management, were reviewed during the audit.

- Previous audit documentation and results January 2000- SMEC
- Operating Licence IL/26, Licence Version 4 dated 6 July 2005



- Asset Management Plan June 2008
- Customer Services Charter Not available
- Relevant correspondence between the Shire and Authority
- Reports (Schedules 3 forms)

### 1.3 Risk Assessment

An Operational Risk Assessment was completed for the audit plan, which identified audit priorities as detailed in Appendix A. They were:

- Asset Management System
- Operational Audit
- Specified information to be provided
- Customer Service Charter

An Asset Management System Risk Assessment completed for the audit plan identified review priorities as detailed in Appendix B. They were:

- Risk Management
- Contingency Planning
- Capital Expenditure Planning
- Review of AMS

The risk assessment scoring systems are included in Appendix C.

### 1.4 Audit Team

The Audit Team was made up of fulltime employees of GHD. No subconsultants were engaged to assist in the audits.

### 1.5 Personnel Interviewed

The following personnel were interviewed on the management, maintenance and operation of the water systems including:

- The Shire
  - Acting Chief Executive Officer Pascoe Durtanovich
  - Works Supervisor Ian Dickinson

### 1.6 Previous Audit

The Shire was previously audited by SMEC in January 2006, Aquaterra in 2003 and SMEC in January 2000. Unfortunately, copies of the two previous audits (2003 and 2006) were not available to the auditor for this audit and review. The Audit report of January 2000, for the period 21<sup>st</sup> May 1997 to 1<sup>st</sup> October 1999 was reviewed and the recommendations and non-compliance issues discussed in the later sections of this report. The Shire's operational licence has been amended since the 2000 report.

### 1.7 Assessment and Measurement of Compliance

The licensee's compliance with the licence requirements were assessed using the effectiveness scales in Table 1and Table 2.

Compliance status	Rating	Description of compliance
Compliant	5	Compliant with no further action required to maintain compliance
Compliant	4	Compliant apart from minor or immaterial recommendations to improve the strength internal controls to maintain compliance
Compliant	3	Compliant with major or material recommendations to improve the strength of internal controls to maintain compliance
Non-compliant	2	Does not meet minimum requirements
Significantly Non- compliant	1	Significant weaknesses and/or serious action required
Not Applicable	N/A	Not Applicable to the Licensee's Operating Licence

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#### Table 2 Asset Management System Assessment Scales

Effectiveness	Rating	Description
Continuously improving	5	Continuously improving organisation capability and process effectiveness
Quantitatively controlled	4	Measurable performance goals established and monitored
Well-defined	3	Standard processes documented, performed and coordinated
Planned and tracked	2	Performance is planned, supervised, verified and tracked
Performed informally	1	Base practices are performed
Not performed	0	Not performed (indicate if not applicable)

In addition to the above compliance assessment or in absence of a specific grading, observations and comments were made by the auditor with recommendations for improvement when deemed appropriate.

### 1.8 Audit Time Input

The professional resource requirements for the operations audit and asset management systems review were as follows:

1.	Preparation of the Audit Plan and Risk Assessments	10 hrs
2.	Conduct the Audit and AM Review (including travel)	6 hrs
3.	Prepare the Draft Report	10 hrs
4.	Review and Amend Draft Report and Prepare Final Report	28 hrs
5.	Total	54 hrs

# 2. Previous Audit

The status of the recommendations from the January 2000 Audit Report by SMEC is shown in the following tables. The status of the recommendations demonstrates that some improvement has occurred since the previous audit and review. The following recommendations were completed under the Economic Regulation Authority's previous guidelines.

### 2.1 Operational Audit

### Table 3 Operational Audit

Previous Audit Recommendation	Progress / Further Action Required
Clause 3 – Section 3.14 – C	ustomer Service Charter
Shire to develop the Customer Service Charter, to be adopted by Council, forward to the Coordinator for	Developed and submitted to the ERA for approval late 2008.
approval and inform the customers of the Charter.	Approval granted outside the audit period.
Clause 3 - Section 3.19 – Customer Comp	laints Process, Reporting and Surveys
Shire to develop the process, create a register and report to the Coordinator.	General complaints register in place – No complaints received. No further action needed.
Clause 4 – Section 4.1 – 4.	3 – Asset Management
Shire to have the AMP adopted by Council and submitted to the Coordinator. AMP developed, dated June 2008 – Minor modifications/formatting required, submitted Council for approval.	
Schedule 12 – Levels of Service Standards, Perfor	mance Indicators and Reporting Requirements
Shire to report in the correct format and on time to the Coordinator.	Some submitted/some missed due to the turnover of staff.
Schedule 17 – Custo	mer Consultation
Shire to establish a customer consultation process.	Has not been required during the audit period.

### 2.2 Asset Management System Review

### Table 4 Asset Management System Review

Previous Audit Recommendation	Progress / Further Action Required
Risk Analysis and C	Contingency Planning
Ongoing risk analysis required to ensure acceptable levels of service with special reference to desludging of ponds and prevent or minimise blockages.	Complete. AMP contains a sections on risk analysis, levels of service and describing the requirement to ensure infrastructure is maintained pro-actively.

Previous Audit Recommendation	Progress / Further Action Required
Capital Expe	enditure Plan
To review the capital expenditure part of the Principal Plan of Activities on an annual basis.	Complete. The AMP contains sections regarding capital expenditure, renewal of assets and information is also contained in other documentation, like the Strategic Plan and Budget.
Rev	view
To review the AMP annually to ensure its currency. Corresponding document control procedures need to be implemented.	Complete. An AMP was developed and completed in 2008 and needs updating and reviewing annually.

# 3. Operating Licence Audit

### 3.1 Operational Audit

Cecil Hensley carried out the audit/review and the field visit provided an overview of documentation, systems and operations.

The wastewater infrastructure are generally in good condition, operated effectively, are well maintained and perform to an acceptable level and generally performed within operational requirements. The assets included:

- Pump Station in Queen Street;
- Reticulation 10.0km and pressure main 0.6km;
- Wastewater Treatment Plant (WWTP) Pond system;
- Effluent reuse pump station, storage tanks, chlorination unit and irrigation system.

Documentation of the "As Constructed" status of the systems has been captured.

Operations and maintenance manuals and contingency management plans are not available for any of the infrastructure.

The town's sewage demand profile has been stable in recent years. Growth is not predicted during the next five year period. The WWTP has adequate capacity to meet the town's requirements.

The Shire completes most of the breakdown and planned works from current staff resources, but has access to licensed plumbers from adjoining towns when required. The systems have proved very reliable over the past three years with hardly any breakdowns and very minor blockages.

The following information, evidence and inspections were audited:

#### Table 5 Operational Audit Checklist

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Operating Area - Clause 2 (b) - Schedule 1	Is it in the correct operating area	Yes - Drawing OWR-OA-035 (B)	5
General duty to provide services - Clause 4.	(a) provide the Water Services; and	Yes, confirmed by site inspection and staff interviews.	5
	(b) undertake, maintain and operate any Water Services Works, specified in the Licence.	Yes, confirmed by site inspection and staff interviews.	5
Regulations prescribing standards of service - Clause 5.	The Licensee shall comply with Regulations prescribing standards of service made under section 61 of the Act.	In order, AMP details the standards of service with reference to the Regulations.	5
Asset management system - Clause 6.	(a) The Licensee is to:		
	(i) provide for an asset management system in respect of the Licensee's Water Service Assets;	The Asset Management Plan and asset register system are current. The system does not include capture of historical activities and tasks.	3
	(ii) notify details of the system and any changes to it to the Authority, and	The revised AMP has not been forwarded to the Authority.	1

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(iii) not less than once in every period of 36 months (or such longer period as the Economic Regulation Authority allows), provide the Economic Regulation Authority with a report by an independent expert acceptable to the Economic Regulation Authority as to the effectiveness of the system.	The Shire was previously audited in 2000, 2003 and 2006. <sup>1</sup>	5
	(b) The asset management system is to set out the measures to be taken by the Licensee for the proper maintenance of Assets used in the provision of Water Services and for the undertaking, maintenance and operation of Water Services works.	The measures for managing the sewerage system are documented in the Asset Management Plan (June 2008).	5
	(c) The Licensee is to undertake, maintain and operate its Water Services Works in accordance with the processes set out in the asset management system.	Routine and planned maintenance tasks are completed in accord with the AMP.	5
	(d) The scope of the asset management system report under paragraph (a) (iii) will be set by the Economic Regulation Authority.	Noted.	
Operational Audit - Clause 7.	(a) The Licensee is to, not less than once in every period of 36 months (or such longer period as the Economic Regulation Authority allows), provide the Economic Regulation Authority with an Operational Audit conducted by an independent expert acceptable to the Economic Regulation Authority.	The Shire was previously audited in 2000, 2003 and 2006. <sup>2</sup>	5

<sup>&</sup>lt;sup>1</sup> The auditor was unaware of the 2003 and 2006 audit reports and provided a con-compliance assessment. This was corrected by the reviewer once the oversight had been discovered. <sup>2</sup> ibid.

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Technical Standards - Clause 8	The Licensee is to comply in line with gazetted technical standards	The AMP includes reference to the relevant technical standards and the site inspection confirmed compliance.	5
Industry codes - Clause 9.	The Licensee shall observe the Sewerage Code of Australia WSA 02 1999 in the design and construction of sewerage systems.	Design of systems complies. Original designs unchanged from Dept of Works Specifications.	5
Accounting records - Clause 10.	The Licensee shall keep accounting records consistent with the requirements of the Local Government Act 1995, the Licensee shall prepare its accounts in a way which enables it to issue an operating statement which accurately describes its income and expenditure in relation to the Water Services provided under the Licence on an accruals basis:	The Shire prepares annual budgets and annual reports in accord with the requirements of the Local Government Act 1995.	5
Prices or charges- Clause 11.	In setting process or charges for services to Customers the Licensee shall comply with the relevant provisions and regulations of the Health Act 1911 and the Local Government Act 1995	Prices and Charges are being set in accordance with the requirements of the Local Government Act.	5
Methods or principles to be applied in the provision of Water Services - Clause 12.	(a) Notwithstanding the engagement of any person or persons to provide Water Services on its behalf, the Licensee remains responsible to ensure those services comply with the terms and conditions of the Licence and with the relevant legislations	Shire staff understand their responsibilities. Where a contractor is appointed he staff ensure works are executed in accordance with the Shire's policies.	5

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(b) The Licensee shall ensure that its Water Services are available for Connection on request to any land situated in the Operating Area, subject to the applicant meeting any reasonable conditions the Licensee may determine to ensure safe, reliable and financially viable supply of services to land in the Operating Area in accordance with this Licence and any relevant legislation.	Application forms have not been prepared. Town is so small that personal approach to the Shire is all that is required. The scheme has capacity to accommodate new services if required.	5
	Satisfactory compliance with the conditions of Connection are an essential requirement of gaining approval to connect to the Licensee's schemes.	The processes are documented in the Customer Services Charter.	
Amendment, revocation or surrender - Clause 13.	The ERA may determine that the Licence is to be amended, etc	New Licence issued 6 August 2008, Licence 26	N/A
Specified information to be provided - Clause 14.	(a) The Licensee shall inform the Authority of the occurrence of the following events within five days of their occurrence:		
	Overflows from wastewater / sewerage infrastructure, including wastewater treatment plants, pumping stations etc.	No occurrences during the period.	N/A
	(b) The ERA may require a detailed report on these events to be provided within 14 days of the request.	Not required during the period.	N/A
	(c) The Licensee shall report the information set out in Schedule 3. The reports are due within 30 days of the end of each financial year.	The Shire did not have a record of submitting the reports.	3 <sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The Authority advised that Schedule 3 reports had been provided. The assessment was revised by the audit reviewer.

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Performance of functions by the Licensee - Clause 15.	(a) The Licensee shall comply with the quality and performance standards set out in Schedule 2.	Services have been provided in accordance with the performance and quality KPIs.	3
		Need documentation to verify compliance.	
	(b) The Licensee shall provide annual notification to all Customers provided with non-potable water that the water supplied is not suitable for drinking.	The Shire is the only non-potable water user. Parks and ovals have warning signs.	5
	(c) The Licensee shall implement an emergency telephone system so a Customer can report an emergency and receive advice within one hour of the action to be taken by the Licensee. An emergency is an event, which causes, or threatens to cause, harm to people, the environment or property.	Emergency and after hours phone services established and published in local phone book, and Customer Charter. Policy to ensure one hour rule is adhered to exists.	5
	(d) The Licensee shall maintain and operate its sewerage scheme so that sewerage does not overflow on Customers' properties.	No incidents recorded during the period.	5
	(e) The Licensee shall maintain and operate its sewerage scheme so that sewerage blockages are minimised.	Less than one blockage per annum during the period.	5

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Terms and conditions of Customer contracts - Clause 16.	(a) The Licensee may enter into agreements with Customers to provide Water Services.	There are no contracts in place.	N/A
	(b) The Licensee may not enter into an agreement with a Customer that excludes, modifies or restricts the terms and conditions of the Licence without the prior written approval of the Economic Regulation Authority.	There are no contracts in place	N/A
Obligations to public authorities and other Licensees - Clause 17.	Wastewater treatment plants operated by the Licensee shall have relevant Licences from the Department of Environmental Protection and be operated in compliance with those Licences.	Based on the daily volume, the WWTP is registered with DEC. A License is not required.	5
Consumer consultation - Clause 18.	(a) Prior to making major changes to the operation of a water service, such as the construction of a new wastewater treatment works or significant expansion of the sewerage network, the licensee will;		
	(i) hold a public meeting to obtain the Customers views on the performance and operation of the scheme; or	Major changes have not occurred during the period.	N/A
	(ii) advertise for written submissions on the proposal.	Not Required	N/A
	(b) The Licensee shall allow customers to raise matters of concern regarding the sewerage system at public question time in accordance with the Local Government Act 1995.	Public question time is available at Council Committee Meetings	5

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
Customer Service Charter - Clause 19.	(a) The Licensee must set out in writing the principles, terms and conditions upon which it intends to provide the Water Services to its Customers ('the Customer Service Charter')	Revised Customer Services Charter prepared, provided for comment in late 2008. The previous Charter was approved in 17 October 2005. The Authority approved the revised Charter on 20 April 2009.	5
	(b) The Customer Service Charter must be submitted to the Authority for his approval by 1 December 1997. The Authority may require changes to be made to the Charter.	The current Charter was approved by the Authority on 17 October 2005. A revised Charter was forwarded to the Authority for approval in 2008.	5
	(c) The Customer Service Charter:		
	(i) should be drafted in 'plain English'; and	Yes, however the Authority advised that the new Charter contains some technical and legalistic language.	4
	(ii) should address all of the service issues that are reasonably likely to be of concern to its Customers.	Yes, as confirmed by the Authority's response to the revised Charter.	5
	(d) Different parts of the Customer Service Charter may be expressed to apply to different classes of Customers.	Not considered in the Charter, but not required for this Licence.	N/A

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(e) The Licensee shall review the Customer Service Charter not less than once in every period of 36 months.	Reviewed during 2008, but not approved until after the due period and outside this audit timeframe.	4
	(f) Any proposed amendment to the Customer Service Charter or replacement thereof must also be forwarded to the Authority for approval prior to implementation.	Submitted for approval in late 2008 and approved by the Authority on 20 April 2009.	5
	(g) The Licensee must make the Customer Service Charter available to its Customers in the following ways:	Copies are not available on request at the Reception counter.	
	<ul><li>(i) by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access;</li></ul>	The Charter is not displayed in the reception area.	1
	(ii) by providing a copy, upon request, and at no charge, to a Customer; and	Customers are not advised of the availability of the Charter.	I
	(iii) by advising Customers of the availability of the Customer Service Charter on an annual basis.		
	(h) It is a condition of the Licence that the Licensee provides services in a way that is materially consistent with its Customer Service Charter.	The Shire does provide services consistent with its Charter as confirmed by the site inspections and staff interviews.	5
Dispute resolution	(a) By 1 April 1999, the Licensee shall establish a system for recording, managing and resolving Customer Complaints within	The Shire's complaints system is detailed in the Charter.	4
Clause 20.	21 days regarding a provided or requested Water Service.		4
	(b) To ensure the effectiveness of such a process the Licensee shall, as a minimum:		

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(i) record details of each Customer Complaint and its outcome;	The Shire maintains a general complaint Log Book.	4
	(ii) provide an appropriate number of designated officers who are trained to deal with Customer Complaints who are authorised to, or has access to officers who are authorised to make the necessary decisions to settle Customer Complaints or disputes; including where applicable, approving the payment of monetary compensation; and	Staff are adequately trained in complaints management. This has not been required to date as no complaints have been received.	4
	(iii) make such arrangements as are necessary to ensure that if possible Complaints can be resolved in the timeframes set out in subclause (a).	The CEO has the authority within the Charter to resolve complaints within the timeframes.	5
	(c) Where a dispute arises between a Customer and the Licensee regarding a provided or requested water service, the Customer may refer the dispute to the Water Services Planning Branch of the Office of Water.	No complaints or dispute during the period.	N/A
	(d) Unless the Complaint or dispute is a matter in relation to which section 3.22 of the Local Government Act 1995 applies, where a dispute has not been resolved within 21 days the Licensee shall inform the Customer of the option of referring their Complaint to the Office of Water Policy.	Not required during the period	N/A
	(e) The Water Services Planning Branch of the Department of Water may:	Not required during the period.	N/A
	(i) mediate the dispute; or		
	(ii) direct the Licensee and Customer to binding arbitration.		

Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(f) During the process of investigation and conciliation, the Licensee shall make every endeavour to promptly cooperate with the Office of Water Policy's (or its representative's) requests, which shall include the expeditious release of any information or documents requested by the Office of Water Policy and the availability of the relevant staff of the Licensee.	Not required during the period.	N/A
	(g) the Licensee shall, on request, provide the Water Services Planning Branch of the Department of Water with details of Complaints made, names and addresses of Customers who have made Complaints, and the manner in which the Complaint was managed and resolved.	Not required during the period.	N/A
Customer Surveys (Clause 21)	(a) Where an issue arises that the Authority considers to be of concern to customers, the Authority may require the Licensee to commission an independent customer survey that shall address and conform to the conditions and parameters set out in writing by the Authority.	Not required during the audit period	N/A
	(b) Such a survey will not be required more frequently than once every 12 months	Not required during the audit period	N/A

# 3.2 Operational Audit

## Table 6 Operational Audit Compliance Summary

Operating area	Operating Licence reference (Cl.=clause, Sch.=schedule)		er to t		-	ating	scale
		1	2	3	4	5	NA
Operating Area Schedule 1	Cl 2(b)					5	
General duty to provide services	Cl 4 (a & b)					5	
Regulations prescribing standards of services	CI 5					5	
Asset Management System	Cl 6 (a – d)				4		
Operational Audit	Cl 7 (a – c)	1					
Technical Standards	CI 8					5	
Industry Codes	CI 9					5	
Accounting Records	CI 10					5	
Prices or charges	CI 11					5	
Methods or principles to be applied in the provision of Water Services	Cl 12 (a – b)					5	
Amendment, revocation or surrender	CI 13						NA
Specified information to be provided	Cl 14 (a – c) Schedule 3	1					
Performance of functions by the Licensee	CI 15						
Performance Standards – Sewerage Services	Schedule 2				4		
Terms and conditions of Customer Contracts	Cl 16 (a –b)						NA
Obligations to public authorities and other Licensees	CI 17					5	
Consumer consultation	Cl 18 (a – b)					5	

Operating area	Operating Licence reference (CI.=clause, Sch.=schedule)	(Ref		:he 5-	-	rating	scale
		1	2	3	4	5	NA
Customer Service Charter	Cl 19 (a – h)			3			
Dispute resolution	Cl 20 (a – g)				4		
Customer Surveys	CI 21						NA

# 4. Asset Management System Review

### 4.1 Asset Management System Review

The Asset Management System is reasonably basic, understood by the staff and generally suitable for the scheme. The Asset Management Plan is reasonably comprehensive and includes most of the sections and information required by the Authority.

The Shire does not have an Asset Management Software System and past activities are not recorded in a central repository. The time spent on maintenance and operations of infrastructure components are captured on timesheets.

The current systems provide a basic maintenance management capability, but do not include the capacity to complete predictive analysis and do not record historic activities and costs desirable in an Asset Management System as detailed in the International Infrastructure Management Manual.

The following information, evidence and inspections were reviewed:

1. Asset Planning	Rating	Comments
Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning	4	Adequately covered in the AMP for a small town, small system, with no growth.
Service levels are defined	5	Adequately addressed in the AMP.
Non-asset options (e.g. demand management) are considered	4	Adequately addressed in the AMP. Limited opportunities in a small town system with no growth.
Lifecycle costs of owning and operating assets are assessed	4	Lifecycle costs are covered at summary level in the AMP. Costs of individual assets have not been assessed
Funding options are evaluated	4	Grants and rates income have been detailed in the AMP.
Costs are justified and cost drivers identified	4	Costs are identified in the AMP with summary detail on drivers and justification.
Likelihood and consequences of asset failure are predicted	4	Likelihood and consequences of asset failure are assessed in the AMP.
Plans are regularly reviewed and updated	4	Only recently updated, but irregularly reviewed in the past.

#### Table 7 Asset Management System Review Checklist

2. Asset Creation and Acquisition	Rating	Comments
Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solution	NA	No projects or new assets created during the audit period and
Evaluations include all life-cycle costs	2	The AMP does not adequately address the process of asset lifecycle cost evaluation.
Projects reflect sound engineering and business decisions	NA	Has not been required during the review period
Commissioning tests are documented and complete	3	Original commissioning tests were not provided with the system was handed over from the PWD and now unlikely to be available. No new assets during the audit period.
Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood	4	Included in the AMP and part of Shire's policies and strategies. Confirmed by site inspections.

3. Asset Disposal	Rating	Comments
Under-utilised and under-performing assets are identified as part of a regular systematic review process	4	Capacity of assets is addressed in the AMP and observed during maintenance activities. Systemic review processes is not in place, but has limited application for a small town with no growth.
The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	4	Adequately covered in the AMP. Requirement is minimal is this small scheme with no growth.
Disposal alternatives are evaluated	4	Adequately addressed in the AMP.
There is a replacement strategy for assets	4	Adequately covered in the AMP. The Shire replaces assets as and when required.

4. Environmental Analysis	Rating	Comments
Opportunities and threats in the system environment are assessed	2	AMP does not include SWOT analysis, but understood and informally evaluated by staff.
Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	3	Detailed in the Levels of Service section of the AMP. Performance is not measured or evaluated.
Compliance with statutory and regulatory requirements	4	Documented in the AMP and compliance confirmed by site inspections and staff interviews.
Achievement of customer service levels	5	The Shire has received very few complaints and operates the system to the Levels of Service detailed in the AMP.

5. Asset Operations	Rating	Comments
Operational policies and procedures are documented and linked to service levels required	3	Safety policies and procedures prescribed in AMP. Operational policies and procedures have not been documented or linked to the service levels.
Risk management is applied to prioritise operations tasks	5	Risk management is well documented in the AMP
Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data	5	The assets are documented in an Asset Register with adequate asset attribute details.
Operational costs are measured and monitored	4	Operational budget vs actual are tracked in the financial management system and summarised in the AMP.
Staff receive training commensurate with their responsibilities	4	Staff have adequate training on operating the system, with additional training on safety (chlorine, hygiene, etc).

6. Asset Maintenance	Rating	Comments
Maintenance policies and procedures are documented and linked to service levels required	2	Maintenance policies and procedures have not been developed.
Regular inspections are undertaken of asset performance and condition	3	Regular inspection and conducted, but records are not kept to verify tasks have been completed.
Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	2	A maintenance schedule has been created, but not implemented.
Failures are analysed and operational/maintenance plans adjusted where necessary	3	Failures are analysed informally and plans are adjusted with the AMP is reviewed.
Risk management is applied to prioritise maintenance tasks	5	Risk management is well prepared and translated into the maintenance plan and schedule.
Maintenance costs are measured and monitored	4	Maintenance budget vs actual is tracked via the financial management system and summarised in the AMP.

7. Asset Management Information System	Rating	Comments
Adequate system documentation for users and IT operators	0	The Shire does not have an AMIS.
Input controls include appropriate verification and validation of data entered into the system	0	The Shire does not have an AMIS.
Logical security access controls appear adequate, such as passwords	0	The Shire does not have an AMIS.
Physical security access controls appear adequate	0	The Shire does not have an AMIS.
Data backup procedures appear adequate	0	The Shire does not have an AMIS.
Key computations related to licensee performance reporting are materially accurate	0	The Shire does not have an AMIS.
Management reports appear adequate for the licensee to monitor licence obligations	0	The Shire does not have an AMIS.

8. Risk Management	Rating	Comments
Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system	3	Risk evaluated and documented in the AMP. Specific policies or procedures for the sewerage system have not been developed.
Risks are documented in a risk register and treatment plans are actioned and monitored	3	Risks are documented in the AMP. The action plan has not been actioned or monitored.
The probability and consequences of asset failure are regularly assessed	4	Risk register in the AMP is current.

9. Contingency Planning	Rating	Comments
Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	4	Emergency Procedures documented in AMP and relevant to the risk assessment.

10. Financial Planning	Rating	Comments
The financial plan states the financial objectives and strategies and actions to achieve the objectives	4	Documented in adequate detail in the AMP
The financial plan identifies the source of funds for capital expenditure and recurrent costs	5	Indicated in budget and documented in the financial plan and AMP.
The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	5	Included in budget in the financial plan and summarised in the AMP.
The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	4	Adequately documented in the AMP.
The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	4	Adequately documented in the AMP.
Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	4	Variances indicated, mainly grants to make up for funding shortages.

11. Capital Expenditure Planning	Rating	Comments
There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates	5	Well documented in the AMP.
The plan provide reasons for capital expenditure and timing of expenditure	5	Well documented in the AMP.
The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	5	Well documented in the AMP.
There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	5	Well documented in the AMP and review proves is detailed.

12. Review of Asset Management System	Rating	Comments
A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	3	Manuals, policies and procedures for sewer system are not included in existing AMP.
		The Shire needs to implement an annual review process/ procedure to ensure the AMP and AMS are kept current.
Independent reviews (eg internal audit) are performed of the asset management system	44	AMS reviewed by external parties at three yearly intervals as part of the Water Licence AMS review.

 $<sup>^{\</sup>rm 4}$  Rating reviewed once 2003 and 2006 audit reports were discovered.

## 4.2 Asset Management System Review Effectiveness Summary

Table 8	Asset Management System Effectiveness Summary
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Asset Management System	Not Performed	Performed Informally	Planned And Tracked	Well Defined	Quantitatively Controlled	Continuously Improving
Process Effectiveness Rating	0	1	2	3	4	5
Asset planning					4	
Asset creation/ acquisition				3		
Asset disposal					4	
Environmental analysis				3		
Asset operations					4	
Asset maintenance				3		
Asset Management Information System	0					
Risk management				3		
Contingency planning					4	
Financial planning					4	
Capital expenditure planning						5
Review of AMS				3		

As mentioned above, for this basic small and simple system, with no growth forecast for the foreseeable future, the current AMP is adequate, but an AMS needs to be developed and implemented. A basic AMIS could be implemented to keep track of activities and demonstrate that procedures are followed.

# 5. Recommendations

The outcome of the inspection of the water services documentation and interviews with the Shire staff was that the sewerage system is operated effectively, within the current standards and code requirements and present minimal risks to the customers and residents. While, the level of documentation and management systems is very basic, these are generally adequate for the number and complexity of the water services assets.

The Shire has no growth and planned refurbishment/replacement of assets has not been required. Some improvements of the pipeline network are planned to address tree root intrusions.

Overall the Shire's operation of the Water Services Licence is compliant with major or material requirements of the Licence. Recommendations have been provided to improve the strength of internal controls to maintain compliance. The primary deficiencies with the operation of the Water Services Licence are the auditing of the asset management system, reporting to the Authority, availability of the customer service charter and the lack of a dispute resolution procedure.

The primary deficiencies with the Shire's Asset Management System are in the areas procedures for asset operations and maintenance, and threats and opportunities of the system environment.

# 5.1 Operational Audit

The following recommendations are provided to improve with the compliance of the Shire's Operating Licence requirements:

Licence Condition	Compliance Rating	Non-compliance issue	Recommended action
Asset management system - Clause 6:	3	The Asset Management Plan and	Implement an AMIS to capture historical asset
(a) The Licensee is to:		asset register system are current. The	performance and cost information, and
(i) provide for an asset management system in respect of the Licensee's Water Service Assets;		system does not include capture of historical activities and tasks.	completed tasks and activities.
(ii) notify details of the system and any changes to it to the Authority, and	1	The revised AMP has not been forwarded to the Authority.	Forward a copy of the revised AMP to the Authority.
Specified information to be provided - Clause 14:	3	The Shire did not have a record of submitting	Develop and implement a data
(c) The Licensee shall report the information set out in Schedule 3. The reports are due within 30 days of the end of each financial year.		the reports.	collecting procedure for information required Schedule 5 in the new licence by the required date.

### Table 9 Operation Audit Summary and Recommendations

Licence Condition	Compliance Rating	Non-compliance issue	Recommended action
Performance of functions by the Licensee - Clause 15.	3	Services have been provided in accordance	Shire to complete Schedule 5 of the new
(a) The Licensee shall comply with the quality and		with the performance and quality KPIs.	Licence annually by the due date.
performance standards set out in Schedule 2.		Need documentation to verify compliance.	
Customer Service Charter	1	Copies are not	Ensure copies of the Customer Service
Clause 19:		available on request at the Reception counter.	Charter (CSC) are
g) The Licensee must make the Customer Service Charter available to its Customers in the following ways:		The Charter is not displayed in the reception area.	available to customers upon request at Reception, display the CSC on the Shire's
(i) by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access;		Customers are not advised of the availability of the Charter.	notice board and advise Customers annually of the CSC availability.
(ii) by providing a copy, upon request, and at no charge, to a Customer; and			
(iii) by advising Customers of the availability of the Customer Service Charter on an annual basis.			

# 5.2 Asset Management System Review

The following improvements are recommended for the Asset Management System:

### Table 10 Asset Management Improvement Recommendations

Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
Asset Planning	Lifecycle costs of owning and operating assets are assessed	4	Lifecycle costs are covered at summary level in the AMP. Costs of individual assets have not been assessed	Complete lifecycle costs for all assets and include in the AMP.
	Plans are regularly reviewed and updated	4	Only recently updated, but irregularly reviewed in the past.	Create and implement review procedure for asset plans. Incorporate a reminding mechanism in procedure.
Asset Creation and Acquisition	Evaluations include all life-cycle costs	2	The AMP does not adequately address the process of asset lifecycle cost evaluation.	Identify and document asset objectives and lifecycle costs for all assets and include in AMP.
Environmental Analysis	Opportunities and threats in the system environment are assessed	2	AMP does not include SWOT analysis, but understood and informally evaluated by staff.	Identify, document and assess opportunities and threats. Include in AMP.
	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	3	Detailed in the Levels of Service section of the AMP. Performance is not measured or evaluated.	Establish a system for measuring and recording performance standards.

Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
Asset Operations	Operational policies and procedures are documented and linked to service levels required	3	Safety policies and procedures prescribed in AMP. Operational policies and procedures have not been documented or linked to the service levels.	Document operational policies and procedures with linkages to the Service Levels.
Asset Maintenance	Maintenance policies and procedures are documented and linked to service levels required	2	Maintenance policies and procedures have not been developed.	Create and document policies linked to maintenance procedures and service levels for assets.
	Regular inspections are undertaken of asset performance and condition	3	Regular inspection and conducted, but records are not kept to verify tasks have been completed.	Expand the maintenance schedule to include procedures for recording maintenance tasks, performance and condition. Include in AMP.
	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	2	A maintenance schedule has been created, but not implemented.	Identify and document maintenance requirements (emergency, corrective and preventative) for assets and create and implement maintenance plans. Include in AMP.
Asset Management Information System	Adequate system documentation for users and IT operators	0	The Shire does not have an AMIS.	Create and implement review procedure for AMIS and include in AMP.
	Input controls include appropriate verification and validation of data entered into the system	0	The Shire does not have an AMIS.	Create and implement review procedure for data verification procedure and include in AMP.

Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
	Logical security access controls appear adequate, such as passwords	0	The Shire does not have an AMIS.	Ensure Asset Management Information System can only be accessed by authorised persons.
	Physical security access controls appear adequate	0	The Shire does not have an AMIS.	Ensure adequate physical security access controls such as swipe cards are implemented
	Data backup procedures appear adequate	0	The Shire does not have an AMIS.	Create and implement backup procedure for asset data.
	Key computations related to licensee performance reporting are materially accurate	0	The Shire does not have an AMIS.	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.
	Management reports appear adequate for the licensee to monitor licence obligations	0	The Shire does not have an AMIS.	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.
Risk Management	Risk management policies and procedures exist and are being	3	Risk evaluated and documented in the AMP.	Create risk management procedures and policies to be included in AMP.
	applied to minimise internal and external risks associated with the asset management system		Specific policies or procedures for the sewerage system have not been developed.	Ensure policy includes risk reviewing procedure.
	Risks are documented in a risk register and treatment plans are actioned and monitored	3	Risks are documented in the AMP. The action plan has not been actioned or monitored.	Action current risks identified in AMP and create procedure for monitoring.

Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
Review of Asset Management System	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	3	Manuals, policies and procedures for sewer system are not included in existing AMP. The Shire needs to implement an annual review process/ procedure to ensure the AMP and AMS are kept current.	Create asset management review procedure to ensure system is reviewed regularly. Expand and implement existing AMP to include manuals, policies and procedures for sewer system.

# 5.3 Conclusion

The Shire's wastewater services systems are generally in reasonable condition and operated effectively by the Shire's staff.

A number of improvements have been implemented to the operation of the scheme and the management systems during the period. The staff's attitude to continuous improvement and their high motivation levels are admirable, and bode well for further improvement in scheme operational efficiency and effectiveness over the next audit period.

The suggested improvements to the operational/performance with regard to the Operating Licence and Asset Management System should provide the Shire with an assurance that the wastewater system can continue to perform effectively.

## 5.4 Compliance Statement

Cecil Hensley has performed this audit/review and prepared this report for the Shire.

It is certified that the "Economic Regulation Authority – Audit Guidelines – Electricity, Gas and Water Licences – September 2006" have been followed in conducting the audit and review, making the findings and preparing the report.

The assessment, findings and recommendations contained in this report reflect the professional opinion of the Reviewer.

# 6. Post-audit Implementation Plan

# 6.1 Operational Post-Audit Implementation Plan

The CEO of the Shire is ultimately responsible for the implementation/rectification of applicable clauses/requirements. The CEO must delegate responsibility or instruct an officer of the Shire or appoint a consultant/contractor to ensure all the requirements as set out by the Licence is adhered to.

All matters listed should be attended to. Implement those which don't comply at all, review and upgrade those which are partially implemented and review and keep those which are in place, up to date.

All matters listed, should be fully implemented, in accordance with the Licence requirements by 30 November 2010.

The Shire shall inform the Authority of its implementation, reviewing, upgrading program and update the Authority 6 monthly (June and December) each year of its progress (difficulties and accomplishments).

The following Table 11 and 12 will be completed by the Shire and forwarded to the Authority independently from this report.

Clause	Recommended Action	Responsible Position	Date Action to be Completed
Asset management system - Clause 6: (a) The Licensee is to:	Implement an AMIS to capture historical asset performance and cost information, and completed tasks and activities.	Environmental Health Officer	30 June 2010
(i) provide for an asset management system in respect of the Licensee's Water Service Assets;			
(ii) notify details of the system and any changes to it to the Authority, and	Forward a copy of the revised AMP to the Authority.	Environmental Health Officer	30 June 2010
Specified information to be provided - Clause 14:	Develop and implement a data collecting procedure for information	Environmental Health Officer	30 June 2010
(c) The Licensee shall report the information set out in Schedule 3. The reports are due within 30 days of the end of each financial year.	required by Schedule 5 of the new licence and ensure information is submitted to Authority by the required date.		

#### Table 11 Operational Post Audit Implementation Plan

Clause	Recommended Action	Responsible Position	Date Action to be Completed
Performance of functions by the Licensee - Clause 15.	Shire to complete Schedule 5 of the new Licence annually by the due date.	Environmental Health Officer	30 June 2010
(a) The Licensee shall comply with the quality and performance standards set out in Schedule 2.			
Customer Service Charter Clause 19:	Ensure copies of the Customer Service Charter (CSC) are available	Chief Executive Officer	30 June 2010
g) The Licensee must make the Customer Service Charter available to its Customers in the following ways:	to customers upon request at Reception, display the CSC on the Shire's notice board and advise Customers annually of the CSC availability.		
(i) by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access;			
(ii) by providing a copy, upon request, and at no charge, to a Customer; and			
(iii) by advising Customers of the availability of the Customer Service Charter on an annual basis.			

# 6.2 Asset Management System Post-Audit Implementation Plan

Asset Management Process	Recommended Action	Responsible position	Date action to be completed
Asset Planning	Complete lifecycle costs for all assets and include in the AMP.	Chief Executive Officer	30 Sept 2010
	Create and implement review procedure for asset plans. Incorporate a reminding mechanism in procedure.	Chief Executive Officer	30 Sept 2010
Asset Creation and Acquisition	Identify and document asset objectives and lifecycle costs for all assets and include in AMP.	Chief Executive Officer	30 Sept 2010
Environmental Analysis	Identify, document and assess opportunities and threats. Include in AMP.	Environmental Health Officer	30 June 2010
	Establish a system for measuring and recording performance standards.	Environmental Health Officer	30 June 2010
Asset Operations	Document operational policies and procedures with linkages to the Service Levels.	Environmental Health Officer	30 June 2010
Asset Maintenance	Create and document policies linked to maintenance procedures and service levels for assets.	Environmental Health Officer	30 June 2010
	Expand the maintenance schedule to include procedures for recording maintenance tasks, performance and condition. Include in AMP.	Environmental Health Officer	30 June 2010
	Identify and document maintenance requirements (emergency, corrective and preventative) for assets and create and implement maintenance plans. Include in AMP.	Environmental Health Officer	30 June 2010

## Table 12 Asset Management Post Audit Implementation Plan

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Asset Management Process	Recommended Action	Responsible position	Date action to be completed
Asset Management Information	Create and implement review procedure for AMIS and include in AMP.	Environmental Health Officer	30 June 2010
System	Create and implement review procedure for data verification procedure and include in AMP.	Environmental Health Officer	30 June 2010
	Ensure Asset Management Information System can only be accessed by authorised persons.	Chief Executive Officer	
	Ensure adequate physical security access controls such as swipe cards are implemented	Chief Executive Officer	
	Create and implement backup procedure for asset data.	Chief Executive Officer	
	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.	Environmental Health Officer	30 June 2010
	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.	Environmental Health Officer	30 June 2010
Risk Management	Create risk management procedures and policies to be included in AMP.	Environmental Health Officer	30 June 2010
	Ensure policy includes risk reviewing procedure.	Environmental Health Officer	30 June 2010
	Action current risks identified in AMP and create procedure for monitoring.	Environmental Health Officer	30 June 2010
Review of Asset Management System	Create asset management review procedure to ensure system is reviewed regularly. Expand and implement existing AMP to include manuals, policies and procedures for sewer system.	Environmental Health Officer	30 June 2010



# Disagreement between the auditor and licensee

None.

Appendix A Operational Risk Assessment

### Table 13 Operational Risk Assessment

Operating Licence Compliance Element	Operating Licence Reference	Risk Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Audit Priority
Operating Area Schedule 1	Cl 2(b)	1	С	Low	Strong	5
General duty to provide services	Cl 4 (a & b)	2	С	Medium	Moderate	4
Regulations prescribing standards of services	CI 5	2	С	Medium	Moderate	4
Asset Management System	Cl 6 (a – d)	2	А	High	Weak	1
Operational Audit	Cl 7 (a – c)	2	А	High	Weak	1
Technical Standards	CI 8	1	С	Low	Moderate	5
Industry Codes	CI 9	1	С	Low	Moderate	5
Accounting Records	CI 10	2	С	Medium	Strong	4
Prices or charges	CI 11	2	С	Medium	Strong	4
Methods or principles to be applied in the provision of Water Services	Cl 12 (a – b)	2	В	Medium	Moderate	4
Specified information to be provided	Cl 14 (a – c) Schedule 3	2	A	High	Weak	1
Performance of functions by the Licensee Performance Standards – Sewerage Services	Cl 15 Schedule 2	2	В	Medium	Moderate	4
Terms and conditions of Customer Contracts	Cl 16 (a –b)	NA	NA	NA	NA	NA
Obligations to public authorities and other Licensees	CI 17	2	В	Medium	Strong	4
Consumer consultation	Cl 18 (a – b)	1	С	Low	Weak	5
Customer Service Charter	Cl 19 (a – h)	2	А	High	Weak	1

Operating Licence Compliance Element	Operating Licence Reference	Risk Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Audit Priority
Dispute resolution	Cl 20 (a – g)	1	С	Low	Moderate	5
Customer Surveys	CI 21	NA	NA	NA	NA	NA

Appendix B Asset Management System Risk Assessment

Key process	Tested by asking the following questions below. If the answer is no, then ask what the effect would be to determine the Consequence and how often will the answer be no to determine the Likelihood and provide an average for each Key Process.	Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Review Priority
	Do the planning process and objectives reflect the needs of all stakeholders and is integrated with business planning					
	Are Service Levels defined					
	Are non-asset options (eg demand management) considered					
Asset planning	Are lifecycle costs of owning and operating assets assessed	2	В	Medium	Moderate	4
	Are funding options evaluated					
	Are costs justified and cost drivers identified					
	Are likelihood and consequences of asset failure predicted					
	Are plans regularly reviewed and updated					
	Are full project evaluations undertaken for new assets, including comparative assessment of non-asset solution					
	Do evaluations include all life-cycle costs					
Asset creation/ acquisition	Do projects reflect sound engineering and business decisions	2	В	Medium	Moderate	4
	Are commissioning tests are documented and complete					
	Are ongoing legal/ environmental/ safety obligations of the asset owner assigned and understood					

## Table 14 Asset Management System Risk Assessment

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Key process	Tested by asking the following questions below. If the answer is no, then ask what the effect would be to determine the Consequence and how often will the answer be no to determine the Likelihood and provide an average for each Key Process.	Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Review Priority
	Are under-utilised and under-performing assets identified as part of a regular systematic review process					
Asset disposal	Are the reasons for under-utilisation or poor performance critically examined and corrective action or disposal undertaken	1	С	Low	Weak	5
	Are disposal alternatives evaluated					
	There is a replacement strategy for assets					
	Are opportunities and threats in the system environment assessed					
Environmental	Are performance standards (availability of service, capacity, continuity, emergency response, etc) measured and achieved	1	С	Low	Weak	5
analysis	Does Shire comply with statutory and regulatory requirements					
	Does Shire achieve customer service levels					
	Are operational policies and procedures documented and linked to service levels required					
	Is risk management applied to prioritise operations tasks					
Asset operations	Are assets documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data	2	А	High	Moderate	2
	Are operational costs measured and monitored					
	Do staff receive training commensurate with their responsibilities					

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Key process	Tested by asking the following questions below. If the answer is no, then ask what the effect would be to determine the Consequence and how often will the answer be no to determine the Likelihood and provide an average for each Key Process.	Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Review Priority
	Are maintenance policies and procedures documented and linked to service levels required					
	Are regular inspections undertaken of asset performance and condition					
Asset maintenance	Are maintenance plans (emergency, corrective and preventative) documented and completed on schedule	2	A	High	Moderate	2
maintenance	Are failures analysed and operational/maintenance plans adjusted where necessary					
	Is risk management applied to prioritise maintenance tasks					
	Are maintenance costs measured and monitored					
	Is system documentation for users and IT operators adequate					
	Are input controls in place, which include appropriate verification and validation of data entered into the system					
Asset	Do logical security access controls appear adequate, such as passwords					
Management	Do physical security access controls appear adequate	1	В	Low	Weak	5
Information System	Do data backup procedures appear adequate		D	2011	Would	Ũ
e je te m	Are key computations related to licensee performance reporting materially accurate					
	Do management reports appear adequate for the licensee to monitor licence obligations					

Key process	Tested by asking the following questions below. If the answer is no, then ask what the effect would be to determine the Consequence and how often will the answer be no to determine the Likelihood and provide an average for each Key Process.	Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Review Priority
Risk management	Do risk management policies and procedures exist and are they applied to minimise internal and external risks associated with the asset management system Are risks documented in a risk register and treatment plans are actioned	3	В	High	Weak	1
	and monitored Are the probability and consequences of asset failure regularly assessed					
Contingency planning	Are contingency plans documented, understood and tested to confirm their operability and to cover higher risks	3	В	High	Weak	1
	Does the financial plan state the financial objectives and strategies and actions to achieve the objectives					
	Does the financial plan identify the source of funds for capital expenditure and recurrent costs					
Financial	Does the financial plan provide projections of operating statements (profit and loss) and statement of financial position (balance sheets)	0	P	Medium	Madarata	4
planning	Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	2	В		Moderate	4
	Does the financial plan provide for the operations and maintenance, administration and capital expenditure requirements of the services					
	Are significant variances in actual/budget income and expenses identified and corrective action taken where necessary					

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Key process	Tested by asking the following questions below. If the answer is no, then ask what the effect would be to determine the Consequence and how often will the answer be no to determine the Likelihood and provide an average for each Key Process.	Consequence Rating	Likelihood Rating	Inherent Risk Rating	Adequacy of Existing Controls	Review Priority
	Is there a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates					
Capital	Does the plan provide reasons for capital expenditure and timing of expenditure	2	В	High	Weak	4
expenditure planning	Is the capital expenditure plan consistent with the asset life and condition identified in the asset management plan	3				1
	Is there an adequate process to ensure that the capital expenditure plan is regularly updated and actioned					
Deview of AMO	Is a review process in place to ensure that the asset management plan and the asset management system described therein are kept current	0	_	Llinh		4
Review of AMS	Are independent reviews (eg internal audit) performed of the asset management system	2	A	High	Weak	1

The following criteria were used to assess internal controls:

- Customer focus
- Regulatory compliance
- Adequate documents and records
- Segregation of duties
- Access controls
- Validity of data
- Performance reviews
- Monitoring

Appendix C Risk Assessment Tables As per the ERA's Audit Guidelines - September 2006

			Examples of Non-C	Compliance	
	Rating	Supply quality	Supply reliability	Consumer Protection	Breaches of legislation or other licence conditions
1	Minor	Minor public health or safety issues. Breach of quality standards minor - minimal impact on customers.	System failure or connection delays affecting only a few customers. Some inconvenience to customers.	Customer complaints procedures not followed in a few instances. Nil or minor costs incurred by customers.	Licence conditions not fully complied with but issues have been promptly resolved.
2	Moderate	Event is restricted in both area and time eg, supply of service to one street is affected for up to one day. Some remedial action is required.	Event is restricted in both area and time eg supply of service to one street is affected for up to one day. Some remedial is required.	Lapse in customer service standards is clearly noticeable but manageable. Some additional cost may be incurred by some customers.	Clear evidence of one or more breaches of legislation or other licence conditions and/or sustained period of breaches.
3	Major	Significant system failure. Life-threatening injuries or widespread health risks. Extensive remedial action required.	Significant system failure. Extensive remedial action required.		

# Table 15 Consequence Ratings

# Table 16Likelihood Ratings

	Level	Criteria
А	Likely	Non-compliance is expected to occur at least once or twice a year
В	Probable	Non-compliance is expected to occur once every three years
С	Unlikely	Non-compliance is expected to occur once every 10 years or longer

### Table 17 Inherent risk rating

Likelihood	Consequence			
	1. Minor	2. Moderate	3. Major	
A. Likely	Medium	High	High	
B. Probable	Low	Medium	High	
C. Unlikely	Low	Medium	High	

# Table 18 Description of Inherent Risk Ratings

Level	Description
High	Likely to cause major damage, disruption or breach of licence obligations
Medium	Unlikely to cause major damage but may threaten the efficiency and effectiveness of service
Low	Unlikely to occur and consequences are relatively minor

### Table 19 Adequacy Ratings for Existing Controls

	Level	Description
3	Strong	Strong controls that are sufficient for the identified risks
2	Moderate	Moderate controls that cover significant risks; improvement possible
1	Weak	Controls are weak or non-existent and have minimal impact on the risks

### Table 20 Assessment of Audit Priority

		Adequacy of existing controls			
		Weak	Moderate	Strong	
Inherent	High	Audit priority 1	Audit priority 2		
Risk	Medium	Audit priority 3	Audit priority 4		
	Low	Audit priority 5			

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