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Shire of Jerramungup

Water Operating Licence Audit and Asset Management Review

Final Report

August 2009



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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 Jerramungup (the Shire) for the period between 1st December 2005 and 30th 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.

Jerramungup is a small town located approximately 354 kilometres south east of Perth. The town has a population of approximately 234 and 162 connections to its water services. The Shire provides the operations and maintenance of:

- » Approximately 4.7kms of sewer collection system for the Shire of Jerramungup; and
- » Wastewater Treatment Plant (WWTP) which collects and treats approximately 22ML per annum of the residential and commercial wastewater.
- » Effluent Reuse, where treated wastewater is disinfected and reticulated to the sports oval.

The last audit was completed by SMEC in January 2006 for the period 1 December 2002 to 30 November 2005. The auditor identified issues and made recommendations on the Shire's compliance with the conditions of its licence. The previous audit was reviewed and some improvement has occurred since the previous period. 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 the Shire's documentation, systems and operations.

The wastewater infrastructure is generally in good condition, operated effectively, are well maintained> The system performs to an acceptable level and generally within the operational requirements of the Licence. Operational improvements were progressively implemented over the period. Documentation of the "As Constructed" status of the systems has been captured.

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

Table (i) Operating Licence Requirements - Summary of Current Issues and Recommendations

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;	Basics are in place with a simple Asset Management Plan and asset register system. AMS does not include manuals, minimal policies and procedures, limited planning, no risk assessments and out of date financial planning.	Expand and implement existing AMS to include manuals, policies and procedures for sewer system.	<i>Environmental Health Officer by 30 October 2010.</i>



Licence Condition	Non-Compliance Issue	Recommended Action	Action Plan
(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 general requirements for maintaining the system are documented in the Asset Management Plan (September 2004). The AMP is out of date and requires additional information as detailed in the Asset Management Systems Review section of this report.	Expand and implement existing AMS to include manuals, policies and procedures for the operation and maintenance of the sewer system.	<i>Environmental Health Officer by 30 October 2010.</i>
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.	Not Submitted.	Immediately gather and submit require information set out in Schedule 5 of the Licence to the Authority.	<i>Environmental Health Officer by 30 October 2009</i>
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 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 the customer service charter is available at request and displayed at reception. Advise customers of the availability of the charter at least once every year.	<i>Environmental Health Officer by 30 October 2010</i>



Licence Condition	Non-Compliance Issue	Recommended Action	Action Plan
Dispute resolution Clause 20 (a) The Licensee shall establish a system for recording, managing and resolving within 21 days Complaints by Customers regarding a provided or requested water service, or for matters which must be considered by Council, within 7 days after the first ordinary Council meeting following the expiry of the 21 day period.	No formal system in place.	Create and implement a formal compliant resolution procedure with the objective to resolve complaints within the required timeframe. Include in Charter.	<i>Environmental Health Officer by 30 October 2010</i>
(b) To ensure the effectiveness of such a process the Licensee shall, as a minimum: (iii) make such arrangements as are necessary to ensure that if possible Complaints can be resolved in the timeframes set out in subclause (a).	No documented procedures.	Create and implement a formal compliant resolution procedure with the objective to resolve complaints within the required timeframe. Include in the Charter.	<i>Environmental Health Officer by 30 October 2010</i>

The Asset Management System comprises the Asset Management Plan and asset register, as constructed drawings, maintenance schedule and financial records. The AMP includes most of the sections and information required by the Authority, but is out of date and missing key information, such as risk assessment and management. Although the Asset Management System is reasonably basic, it is understood by the staff and generally suitable for the scheme. 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, not specific sewerage schedules.

While the current components provide a basic maintenance management system, they do not include the predictive capabilities and do not record history activities 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).



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
Asset planning	Lifecycle costs of owning and operating assets are assessed	Lifecycle costs of all owning and operating assets have not been assessed.	Identify and document asset objectives and lifecycle costs for all assets and include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
	Costs are justified and cost drivers identified	Summary costs are included in the AMP, but no detail on justification or cost drivers.	Include a section in the AMP on cost justification and discussion on cost drivers.	<i>Environmental Health Officer by 30 October 2010</i>
	Likelihood and consequences of asset failure are predicted	Operate and maintain – general feel of chance to fail. Likelihood and consequences of asset failure are informally evaluated.	Identify and document likelihood and consequences of asset failure in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
	Plans are regularly reviewed and updated	Plans have been reviewed approximately every 3 years; need to be updated by the Shire to contain the required information,	Create and document a review procedure in-line with Authority guidelines for the AMP.	<i>Environmental Health Officer by 30 October 2010</i>
Asset disposal	Under-utilised and under-performing assets are identified as part of a regular systematic review process	Informally assessed during maintenance or repairs activities. Systematic review process has not been implemented	Create and implement a process for identifying capacity of assets and recording past performance. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>



Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
	There is a replacement strategy for assets	Informally assessed during maintenance or repairs activities. Systematic review process has not been implemented	Create and implement a process for identifying capacity of assets and recording past performance. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
Environmental analysis	Opportunities and threats in the system environment are assessed	Not addressed in AMP.	Identify, document and apply SWOT analysis to opportunities and threats. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	Addressed in the Levels of Service Section of the AMP, but performance is not measured or evaluated	Identify and document performance requirements for all assets including availability of service and capacity. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
Asset operations	Risk management is applied to prioritise operations tasks	Emergency response procedure in AMP. However, minimal risk management completed and not in any systematic way.	Create and implement a regular review procedure for the operational schedule to prioritise tasks based on risk management.	<i>Environmental Health Officer by 30 October 2010</i>
	Risk management is applied to prioritise operations tasks	Emergency response procedure in AMP. However, minimal risk management completed.	Prepare and document risk management of operational tasks and use to prioritise tasks.	<i>Environmental Health Officer by 30 October 2010</i>
Asset maintenance	Regular inspections are undertaken of asset performance and condition	Inspections are completed in accordance with the maintenance plan, but activities are not recorded.	Expand the maintenance schedule to include procedures for recording maintenance tasks, performance and condition. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>



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	Maintenance plan is included in the AMP. Maintenance schedule has not been prepared and activities are not documented.	Identify and document maintenance requirements (emergency, corrective and preventative) for assets and create and implement maintenance plans. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
	Risk management is applied to prioritise maintenance tasks	Has not been completed.	Undertake risk analysis of maintenance tasks and prioritise maintenance plan based on risk assessment.	<i>Environmental Health Officer by 30 October 2010</i>
Asset Management Information System	Adequate system documentation for users and IT operators	No AMIS in place	Purchase / Develop Asset Management software and roll over all asset data to one system.	<i>Environmental Health Officer by 30 October 2010</i>
	Input controls include appropriate verification and validation of data entered into the system	No AMIS in place	Create data verification procedure for updating asset data in Asset Management software.	<i>Environmental Health Officer by 30 October 2010</i>
	Logical security access controls appear adequate, such as passwords	No AMIS in place	Ensure Asset Management Information System can only be accessed by authorised persons.	<i>Environmental Health Officer by 30 October 2010</i>
	Physical security access controls appear adequate	No AMIS in place	Ensure adequate physical security access controls such as swipe cards are implemented.	<i>Environmental Health Officer by 30 October 2010</i>
	Data backup procedures appear adequate	No AMIS in place	Create and implement backup procedure for asset data.	<i>Environmental Health Officer by 30 October 2010</i>



Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
	Key computations related to licensee performance reporting are materially accurate	No AMIS in place	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.	<i>Environmental Health Officer by 30 October 2010</i>
	Management reports appear adequate for the licensee to monitor licence obligations	No management reports prepared.	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.	<i>Environmental Health Officer by 30 October 2010</i>
Risk management	Risk management policies and procedures exist and are being applied to minimise internal and external risks associated with the asset management system	Risk management policies or procedures have not been prepared.	Create risk management procedures and policies to be included in AMP. Ensure policy includes risk reviewing procedure.	<i>Environmental Health Officer by 30 October 2010</i>
	Risks are documented in a risk register and treatment plans are actioned and monitored	Risks register has not been prepared and treatment plans have not been developed.	Action current risks identified in AMP and create procedure for monitoring.	<i>Environmental Health Officer by 30 October 2010</i>
	The probability and consequences of asset failure are regularly assessed	Informally completed by staff by subjective judgement. Asset failure risks have not been formally assessed or documented.	Create and document risk register including the treatment and consequences of asset failure. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
Contingency Planning	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	“Emergency Response” is briefly addressed in the AMP. Contingency plans have not been prepared.	Prepare a contingency plan for each asset group, document in the AMP and test for high risks.	<i>Environmental Health Officer by 30 October 2010</i>



Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
Financial planning	The financial plan states the financial objectives and strategies and actions to achieve the objectives	Well covered in the Plan of Principal Activities (PPA) and in summary in the AMP. AMP needs to include the relevant objectives, strategies and actions from the PPA.	Update the financial plan objectives, strategies and actions and develop a review procedure.	<i>Environmental Health Officer by 30 October 2010</i>
	The financial plan identifies the source of funds for capital expenditure and recurrent costs	Included in the AMP for 2003/04. Financial Plan in AMP needs to be expanded to cover 5 year funding projections.	Update the financial plan to include more detail of sources of current and forecast funds for capital expenditure and recurrent costs.	<i>Environmental Health Officer by 30 October 2010</i>
	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	AMP contains a profit and loss summary for 2003/04, but no information of projected statements.	Update and expand the financial plan in the AMP to include more detail of financial position and projections for the next five years.	<i>Environmental Health Officer by 30 October 2010</i>
	The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	Included in the PPA and annual budgets. AMP does not include any income predictions.	Update the 5 year financial plan in the AMP and include predicted costs for operation, maintenance and capital upgrade and expansion.	<i>Environmental Health Officer by 30 October 2010</i>
	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	Variances indicated in the 2003/04 summary, but not detail provided on reasons or any corrective actions. Variations beyond 2003/04 have not been detailed.	Include a commentary in the Financial Plan section of the AMP to explain the reasons for variations in budget and actual expenditures and incomes.	<i>Environmental Health Officer by 30 October 2010</i>



Asset Management Process	Effectiveness Criteria	Non-compliance issue	Recommended Action	Post Audit Action Plan
Capital Expenditure Planning	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	The capital expenditure plan in the AMP finished in 2008 and has not been regularly reviewed. The Shire does include capital expenditure review as part of the annual budget review process.	Update current capital expenditure plan and develop a review procedure. Include in AMP.	<i>Environmental Health Officer by 30 October 2010</i>
Review of AMS	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	The AMP was revised in 2004 and contains out of date information. A review process has not been implemented. The Shire does not have an AMIS to monitor and document operations and maintenance activities and tasks, asset performance or asset expenditures.	Create asset management review procedure to ensure system is reviewed regularly. Expand and implement existing AMS to include manuals, policies and procedures for sewer system. Update to AMP to include the missing information identified in this table and update the financial expenditures.	<i>Environmental Health Officer by 30 October 2010</i>



The inspection of the water services, documentation reviews and interviews with the Shire staff revealed 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 in the area of asset management plan, 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 of risk analysis, updating of the financial and capital expenditure plans, contingency plans and threats and opportunities of the system environment.

The AMP requires updating and expansion to be in line with Authority's requirements. The Shire also needs a basic AMIS to keep track of activities and demonstrate that procedures are followed.



1. Introduction

This Operating Licence audit and Asset Management System review was carried out on the water services (sewerage) for the Shire of Jerramungup (the Shire) for the period between 1st December 2005 and 30th November 2008 in accordance with the approved Audit Plan and the Audit Guidelines of the Economic Regulation Authority (the 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.

Jerramungup is a small town located approximately 354 kilometres south east of Perth. The town has a population of approximately 234 and 162 connections to the sewerage system. The Water Services include the operation and maintenance of:

- » Approximately 4.7kms of sewer collection system for the Shire of Jerramungup; and
- » Wastewater Treatment Plant (WWTP) which collects and treats approximately 22ML per annum of the residential and commercial wastewater.
- » Effluent re-use system where treated wastewater is disinfected and reticulated to the sports oval.

The scope of services and licence compliance requirements are detailed in the Shire of Jerramungup's Operating Licence, Licence Registration Number IL/19, Licence Version 4 dated 28 September 2004. While the Licence was amended on 6th August 2008, the previous version of the Licence was used as the basis of this audit as it applied for the majority of the audit period and the changed provisions of the new licence had not been implemented by the Shire. This audit and review has been prepared in accordance with "The Economic Regulation 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 2006 - SMEC
- » Operating Licence – IL/19, Licence Version 4 dated 28 September 2004
- » Asset Management Plan – September 2004



- » Customer Services Charter – 2008
- » Relevant correspondence between the Shire and the ERA

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
- » Specified information to be provided

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

- » Contingency Planning
- » Capital Expenditure Planning
- » Review 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
 - Chief Executive Officer (CEO) – Bill Parker
 - Works Manager (WM) – Graham Edwards

1.6 Previous Audit

The Audit report of January 2006, which was for the period 1st December 2002 to 30th November 2005 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 2006 report.

1.7 Assessment and Compliance Scales

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



Table 1 Operating Licence Assessment Scales

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

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 previous audit by SMEC (Audit Report of January 2006) is shown in the following tables. The status of the recommendations demonstrates that minimal improvement has occurred since the previous audit and review.

2.1 Operational Audit

Table 3 Operational Audit

Previous audit recommendation	Progress / Further action required
Asset Management System (Clause 6)	
The latest AMP be found and placed in an easily accessible location for all those who require access to it. Also, if necessary, it should be forwarded to the Authority for approval.	The later version of the AMP (Sep 2004) was available. The AMP has not been reviewed since 2004 and contains out of date information. A revision of AMP is overdue.
Specific Information to be Provided (Clause 14)	
The Shire immediately fill in the Schedule 3 form and forward it to the Authority. The Shire to ensure that the form is filled in and submitted to the Authority within 30 days of the end of each financial year.	No improvement. The Shire has not submitted Schedule 3 Reports. The old Schedule 3 has been replaced in the new licence by Schedule 5 with requires an annual report in accord with the Water Compliance Reporting Manual.

2.2 Asset Management System Review

Table 4 Asset Management System Review

Previous audit recommendation	Progress / Further action required
Environmental Analysis	
The AMP should mention the effluent reuse program.	No progress. The 2004 version of the AMP does not include the effluent reuse scheme.
Financial Planning	
It would be beneficial to have all the relevant financial and capital expenditure information pertaining to the sewerage scheme collated from the Financial Plan, Plan of Principal Activities and annual budget and included in the AMP.	Partial Progress. The 2004 version of the AMP includes summary Financial Planning information. This information is now out of date.



Previous audit recommendation	Progress / Further action required
Review	
<p>The AMP and Charter should be reviewed every 12 months at the same time as the annual budget, and updated as necessary. They should be updated within every 36 months, thus the Charter is due to be updated next year.</p>	<p>Partially complete. The Charter was review and approved by the Authority on 10 Dec 2008. The AMP has not been reviewed since 2004 and a revision is well overdue.</p>



3. Operating Licence Audit

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

- » 4.7km Reticulation Network;
- » Wastewater Treatment Plant (WWTP) – 2 Oxidation Ponds; and
- » Effluent Re-use system including the chlorination unit and pumping to irrigate the oval.

Operational improvements were progressively implemented over the period. 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 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.

3.1 Operational Audit

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	(b) The Licence permits the provision of Water Services within the Operating Areas described in Schedule 1 subject to compliance with the requirements of the Licence.	Yes - Drawing OWR-OA-036/2	5
General duty to provide services - Clause 4.	The Licensee is to —		
	(a) provide the Water Services; and	Yes, verified by site inspections	5
	(b) undertake, maintain and operate any Water Services Works, specified in the Licence.	Yes, verified by site inspections 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.	Yes, detailed in Section 5 of the AMP	4
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;	Basics are in place with a simple Asset Management Plan and asset register system. AMS does not include manuals, minimal policies and procedures, limited planning, no risk assessments and out of date financial planning.	2
	(ii) notify details of the system and any changes to it to the Authority, and	No changes have occurred during the period.	N/A



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.	Water Services Audit and Asset Management Review Report of December 2005 provided to Economic Regulation Authority.	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 general requirements for maintaining the system are documented in the Asset Management Plan (September 2004). The AMP is out of date and requires additional information as detailed in the Asset Management Systems Review section of this report.	2
	(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 have been completed in accord with Section 6 and 7 of the AMP.	4
	(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 last Water Services audited and Asset Management System reviewed by SMEC for the period 1 December 2002 to 30 November 2005.	5



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 with the technical standards for the provision of Water Services; and the undertaking, maintenance and operation of Water Services works; published by the Authority in the Government Gazette.	The Shire has access to the Government Gazette online and has included the application of technical standards within the AMP.	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.	Consistent with the accounting 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.	Budgets and annual reports are available and prepared in accordance with the Local Government Act 1995.	5
Prices or charges- Clause 11.	In setting prices 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 legislation.	Shire staff understand their responsibilities. Where a contractor is appointed the staff ensures that works are executed in accordance with the Shire's policies.	5
	(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	Application forms have not been prepared. Town is so small that personal approach to the Shire is	5



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	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. Satisfactory compliance with the conditions of Connection is an essential requirement of gaining approval to connect to the Licensee's schemes.	all that is required. 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 19.	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.	Not Submitted.	1
Performance of functions by the Licensee - Clause 15.	(a) The Licensee shall comply with the quality and performance standards set out in Schedule 2.	No problems.	5
	(b) The Licensee shall provide annual notification to all Customers provided with non-potable water that the water supplied is not suitable for drinking.	Treated effluent allowed to evaporated and infiltrate into surrounding ground.	N/A



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(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
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 WWTP is registered with the DEC. A Licence 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



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(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
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 - 2008.	5
	(b) The Customer Service Charter must be submitted to the Authority for his approval by 1 July 1997. The Authority may require changes to be made to the Charter.	Forwarded to the ERA for approval in 2008.	5
	(c) The Customer Service Charter:		
	(i) should be drafted in 'plain English'; and	Yes	5
	(ii) should address all of the service issues that are reasonably likely to be of concern to its Customers.	Yes	5
	(d) Different parts of the Customer Service Charter may be expressed to apply to different classes of Customers.	Not considered in the Customer Service Charter, but little requirement for this Licence.	N/A
	(e) The Licensee shall review the Customer Service Charter not less than once in every period of 36 months.	Reviewed and reissued in 2008.	5
	(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 dated 2008.	5



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	<p>(g) The Licensee must make the Customer Service Charter available to its Customers in the following ways:</p> <p>(i) by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access;</p> <p>(ii) by providing a copy, upon request, and at no charge, to a Customer; and</p> <p>(iii) by advising Customers of the availability of the Customer Service Charter on an annual basis.</p>	<p>Copies not available on request at the Reception counter.</p> <p>The Charter is not displayed in the reception area.</p> <p>Customers are not advised of the availability of the Charter.</p>	1
	<p>(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.</p>	Yes – Compliance Scale	5
Dispute resolution Clause 20.	<p>(a) The Licensee shall establish a system for recording, managing and resolving within 21 days Complaints by Customers regarding a provided or requested water service, or for matters which must be considered by Council, within 7 days after the first ordinary Council meeting following the expiry of the 21 day period.</p>	No formal system in place.	1
	<p>(b) To ensure the effectiveness of such a process the Licensee shall, as a minimum:</p>		
	<p>(i) record details of each Customer Complaint and its outcome;</p>	General complaints Log Book.	4
	<p>(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</p>	Staff are adequate trained . Has not been required as no complaints received to date.	4



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
	(iii) make such arrangements as are necessary to ensure that if possible Complaints can be resolved in the timeframes set out in subclause (a).	No documented procedures.	1
	(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 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 Office of Water Policy may:	Not required during the period.	N/A
	(i) mediate the dispute; or		
	(ii) direct the Licensee and Customer to binding arbitration.		
	(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 Office of Water Policy with details of Complaints made and the names and addresses of Customers who have made Complaints.	Not required during the period.	N/A



Licence Clause or Schedule	The Licence Obligation	System established by the Licensee to comply with obligations of Licence	Compliance Scale
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 Compliance Summary

Table 6 Operational Audit Compliance Summary

Operating area	Operating Licence reference (Cl.=clause, Sch.=schedule)	Compliance Rating (Refer to the 5-point rating scale in Table 1 for details)					
		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	Cl 5				4		
Asset Management System	Cl 6 (a – d)			3			
Operational Audit	Cl 7 (a – c)					5	
Technical Standards	Cl 8					5	
Industry Codes	Cl 9					5	
Accounting Records	Cl 10					5	
Prices or charges	Cl 11					5	
Methods or principles to be applied in the provision of Water Services	Cl 12 (a – b)					5	
Amendment, revocation or surrender	Cl 13						NA
Specified information to be provided	Cl 14 (a – c) Schedule 3	1					
Performance of functions by the Licensee	Cl 15					5	
Performance Standards – Sewerage Services	Schedule 2						
Terms and conditions of Customer Contracts	Cl 16 (a –b)						NA
Obligations to public authorities and other Licensees	Cl 17					5	



Operating area	Operating Licence reference (Cl.=clause, Sch.=schedule)	Compliance Rating (Refer to the 5-point rating scale in Table 1 for details)					
		1	2	3	4	5	NA
Consumer consultation	Cl 18 (a – b)					5	
Customer Service Charter	Cl 19 (a – h)				4		
Dispute resolution	Cl 20 (a – g)		2				
Customer Surveys	Cl 21		NA				NA



4. Asset Management System Review

The Asset Management System comprises the Asset Management Plan, which is reasonably comprehensive and includes most of the sections and information required by the ERA. The Asset Management System is reasonably basic and understood by the staff and generally suitable for the scheme. 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, not specific sewerage schedules.

While the current components provide a basic maintenance management system, they do not include the predictive and records history capabilities desirable in an Asset Management System as detailed in the International Infrastructure Management Manual.

4.1 Asset Management System Review

The following information, evidence and inspections were reviewed:

Table 7 Asset Management System Review Checklist

1	Asset Planning	Rating	Comments
	Planning process and objectives reflect the needs of all stakeholders and is integrated with business planning	3	Adequately covered in the AMP for a small town, small system, with no growth, and operate and maintain only.
	Service levels are defined	3	Adequately covered in Section 3 of the AMP.
	Non-asset options (e.g. demand management) are considered	3	Adequately covered in the AMP for a small town, small system and with no growth.
	Lifecycle costs of owning and operating assets are assessed	2	Lifecycle costs of all assets have not been assessed.
	Funding options are evaluated	3	Grants and rates income have been addressed in AMP.
	Costs are justified and cost drivers identified	2	Summary costs are included in the AMP, but no detail on justification or cost drivers.
	Likelihood and consequences of asset failure are predicted	2	Likelihood and consequences of asset failure are informally evaluated. Risk of asset failures has not been assessed or documented.
	Plans are regularly reviewed and updated	2	Current AMP contains out of date and inaccurate information, and has not been updated since 2004.



2 Asset Creation and Acquisition	Rating	Comments
Full project evaluations are undertaken for new assets, including comparative assessment of non-asset solution	NA	Has not been required during the audit period as no assets have been created or acquired.
Evaluations include all life-cycle costs	NA	Has not been required during the audit period.
Projects reflect sound engineering and business decisions	NA	Has not been required during the audit period.
Commissioning tests are documented and complete	NA	Has not been required during the audit period.
Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood	3	Part of Shire's requirements, policies and strategies, and documented in the AMP.

3 Asset Disposal	Rating	Comments
Under-utilised and under-performing assets are identified as part of a regular systematic review process	2	Informally assessed during maintenance or repairs activities. Systematic review process has not been implemented
The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	3	Completed informally. Very little need in a small simple and stable scheme.
Disposal alternatives are evaluated	NA	Has not been required during the audit period.
There is a replacement strategy for assets	1	The AMP does not address for any of the assets.

4 Environmental Analysis	Rating	Comments
Opportunities and threats in the system environment are assessed	1	Not addressed in AMP.
Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	3	Addressed in the Levels of Service Section of the AMP, but performance is not measured or evaluated.
Compliance with statutory and regulatory requirements	5	Shire does comply with requirements and is documented in the AMP.



4 Environmental Analysis	Rating	Comments
Achievement of customer service levels	5	Very few complaints and the system operated effectively during the audit period.

5 Asset Operations	Rating	Comments
Operational policies and procedures are documented and linked to service levels required	4	Operational policies and procedures are documented in the AMP and linked to required service levels.
Risk management is applied to prioritise operations tasks	2	Emergency response procedure in AMP. However, minimal risk management completed and not in any systematic way.
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	4	Asset Register is well documented, as constructed status of assets has been captured and condition is recorded in the AMP.
Operational costs are measured and monitored	3	Operational Budget vs Actual is tracked in the financial managements system
Staff receive training commensurate with their responsibilities	3	Staff have adequate training on operating the system with additional training on safety (chlorine, hygiene, etc). Staff have limited training on AMS.

6 Asset Maintenance	Rating	Comments
Maintenance policies and procedures are documented and linked to service levels required	4	Maintenance policies or procedures are documented in the AMP.
Regular inspections are undertaken of asset performance and condition	3	Inspections are completed in accordance with the maintenance plan, but activities are not recorded.
Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	3	Maintenance plan is included in the AMP. Maintenance schedule has not been prepared and activities are not documented.



6 Asset Maintenance	Rating	Comments
Failures are analysed and operational/maintenance plans adjusted where necessary	3	Failures are rare and informally analysed when they occur. Adjustment of the operational or maintenance plans has not been required during the audit period.
Risk management is applied to prioritise maintenance tasks	1	Has not been completed.
Maintenance costs are measured and monitored	4	Maintenance Budget vs Actual is tracked in the financial management systems.

7 Asset Management Information System	Rating	Comments
Adequate system documentation for users and IT operators	0	No AMIS in place
Input controls include appropriate verification and validation of data entered into the system	0	No AMIS in place
Logical security access controls appear adequate, such as passwords	0	No AMIS in place
Physical security access controls appear adequate	0	No AMIS in place
Data backup procedures appear adequate	0	No AMIS in place
Key computations related to licensee performance reporting are materially accurate	0	No AMIS in place
Management reports appear adequate for the licensee to monitor licence obligations	0	No reports produced.

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	1	Risk management policies or procedures have not been prepared.
Risks are documented in a risk register and treatment plans are actioned and monitored	1	Risks register has not been prepared and treatment plans have not been developed.
The probability and consequences of asset failure are regularly assessed	1	Informally completed by staff by subjective judgement. Asset failure risks have not been formally assessed or documented.



9 Contingency Planning	Rating	Comments
Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	1	"Emergency Response" is briefly addressed in the AMP. Contingency plans have not been prepared.

10 Financial Planning	Rating	Comments
The financial plan states the financial objectives and strategies and actions to achieve the objectives	3	Well covered in the Plan of Principal Activities (PPA) and in summary in the AMP. AMP needs to include the relevant objectives, strategies and actions from the PPA.
The financial plan identifies the source of funds for capital expenditure and recurrent costs	3	Included in the AMP for 2003/04. Financial Plan in AMP needs to be expanded to cover 5 year funding projections.
The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	3	AMP contains a profit and loss summary for 2003/04, but no information of projected statements.
The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	2	Included in the PPA and annual budgets. AMP does not include any income predictions.
The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	3	Summary information for 2003/04 is included in the AMP. Annual budgets include current information..
Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	2	Variances indicated in the 2003/04 summary, but not detail provided on reasons or any corrective actions. Variations beyond 2003/04 have not been detailed.

11 Capital Expenditure Planning	Rating	Comments
There is a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates	3	The Capital Plan is included in the AMP. As there is no projected expenditure, development of a more comprehensive plan has not been required.



11 Capital Expenditure Planning	Rating	Comments
The plan provide reasons for capital expenditure and timing of expenditure	NA	No capital expenditure has been forecast within the 5 year projection included in the AMP.
The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	3	Capital Plan is consistent with the asset register details and documented conditions.
There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	2	The capital expenditure plan in the AMP finished in 2008 and has not been regularly reviewed. The Shire does include capital expenditure review as part of the annual budget review process.

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	2	<p>The AMP was revised in 2004 and contains out of date information. A review process has not been implemented.</p> <p>The Shire does not have an AMIS to monitor and document operations and maintenance activities and tasks, asset performance or asset expenditures.</p>
Independent reviews (eg internal audit) are performed of the asset management system	5	The AMS is reviewed as part of the Water Licence audit and was completed in 2006 and 2009.



4.2 Asset Management System Review Effectiveness Summary

Table 8 Asset Management System Effectiveness Summary

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			2			
Asset creation/ acquisition			2			
Asset disposal			2			
Environmental analysis				3		
Asset operations				3		
Asset maintenance				3		
Asset Management Information System	0					
Risk management		1				
Contingency planning		1				
Financial planning				3		
Capital expenditure planning				3		
Review of AMS				3		



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 in the area of asset management plan, 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 of risk analysis, updating of the financial and capital expenditure plans, contingency plans and threats and opportunities of the system environment. The AMP is well overdue for revision and should be expanded to include the additional information as detailed in the Asset Management System Review (table 8). The Shire also needs a basic AMIS to keep track of activities and demonstrate that procedures are followed.

5.1 Operational Audit

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

Table 9 Operational Audit Recommendations

Licence Condition	Compliance Rating	Non-Compliance Issue	Recommended Action
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;	2	Basics are in place with a simple Asset Management Plan and asset register system. AMS does not include manuals, minimal policies and procedures, limited planning, no risk assessments and out of date financial planning.	Expand and implement existing AMS to include manuals, policies and procedures for sewer system.



Licence Condition	Compliance Rating	Non-Compliance Issue	Recommended Action
(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.	2	The general requirements for maintaining the system are documented in the Asset Management Plan (September 2004). The AMP is out of date and requires additional information as detailed in the Asset Management Systems Review section of this report.	Expand and implement existing AMS to include manuals, policies and procedures for the operation and maintenance of the sewer system.
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.	1	Not Submitted.	Immediately gather and submit require information set out in Schedule 5 of the Licence to the Authority.
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.	1	Copies 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 the customer service charter is available at request and displayed at reception. Advise customers of the availability of the charter at least once every year.



Licence Condition	Compliance Rating	Non-Compliance Issue	Recommended Action
<p>Dispute resolution Clause 20</p> <p>(a) The Licensee shall establish a system for recording, managing and resolving within 21 days Complaints by Customers regarding a provided or requested water service, or for matters which must be considered by Council, within 7 days after the first ordinary Council meeting following the expiry of the 21 day period.</p>	1	No formal system in place.	Create and implement a formal compliant resolution procedure with the objective to resolve complaints within the required timeframe. Include in Charter.
<p>(b) To ensure the effectiveness of such a process the Licensee shall, as a minimum:</p> <p>(iii) make such arrangements as are necessary to ensure that if possible Complaints can be resolved in the timeframes set out in subclause (a).</p>	1	No documented procedures.	Create and implement a formal compliant resolution procedure with the objective to resolve complaints within the required timeframe. Include in the Charter.

5.2 Asset Management System Review

The following improvements are recommended for the Asset Management System:



Table 10 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	2	Lifecycle costs of all assets have not been assessed.	Identify and document asset objectives and lifecycle costs for all assets and include in AMP.
	Costs are justified and cost drivers identified	2	Summary costs are included in the AMP, but no detail on justification or cost drivers.	Include a section in the AMP on cost justification and discussion on cost drivers.
	Likelihood and consequences of asset failure are predicted	2	Operate and maintain – general feel of chance to fail. Likelihood and consequences of asset failure are informally evaluated.	Identify and document likelihood and consequences of asset failure in AMP.
	Plans are regularly reviewed and updated	2	Plans have been reviewed approximately every 3 years; need to be updated by the Shire to contain the required information,	Create and document a review procedure in-line with Authority guidelines for the AMP.
Asset disposal	Under-utilised and under-performing assets are identified as part of a regular systematic review process	2	Informally assessed during maintenance or repairs activities. Systematic review process has not been implemented	Create and implement a process for identifying capacity of assets and recording past performance. Include in AMP.



Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
	There is a replacement strategy for assets	1	The AMP does not address for any of the assets	Create and implement replacement strategy for assets and include in AMP.
Environmental analysis	Opportunities and threats in the system environment are assessed	1	Not addressed in AMP.	Identify, document and apply SWOT analysis to opportunities and threats. Include in AMP.
	Performance standards (availability of service, capacity, continuity, emergency response, etc) are measured and achieved	3	Addressed in the Levels of Service Section of the AMP, but performance is not measured or evaluated.	Identify and document performance requirements for all assets including availability of service and capacity. Include in AMP.
Asset operations	Risk management is applied to prioritise operations tasks	2	Emergency response procedure in AMP. However, minimal risk management completed and not in any systematic way.	Create and implement a regular review procedure for the operational schedule to prioritise tasks based on risk management.
	Staff receive training commensurate with their responsibilities	3	Staff have adequate training on operating the system with additional training on safety (chlorine, hygiene, etc). Staff have limited training on AMS.	Provide key staff with training in Asset Management Systems.
Asset maintenance	Regular inspections are undertaken of asset performance and condition	3	Inspections are completed in accordance with the maintenance plan, but activities are not recorded.	Expand the maintenance schedule to include procedures for recording maintenance tasks, performance and condition. Include in AMP.



Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	3	Maintenance plan is included in the AMP. Maintenance schedule has not been prepared and activities are not documented.	Identify and document maintenance requirements (emergency, corrective and preventative) for assets and create and implement maintenance plans. Include in AMP.
	Risk management is applied to prioritise maintenance tasks	2	Has not been completed.	Undertake risk analysis of maintenance tasks and prioritise maintenance plan based on risk assessment.
Asset Management Information System	Adequate system documentation for users and IT operators	0	No AMIS in place	Purchase / develop Asset Management software and roll over all asset data to one system.
	Input controls include appropriate verification and validation of data entered into the system	0	No AMIS in place	Create data verification procedure for updating asset data in Asset Management software.
	Logical security access controls appear adequate, such as passwords	0	No AMIS in place	Ensure Asset Management Information System can only be accessed by authorised persons.
	Physical security access controls appear adequate	0	No AMIS in place	Ensure adequate physical security access controls such as swipe cards are implemented.
	Data backup procedures appear adequate	0	No AMIS in place	Create and implement backup procedure for asset data.



Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
	Key computations related to licensee performance reporting are materially accurate	0	No AMIS in place	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	No management reports prepared.	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 applied to minimise internal and external risks associated with the asset management system	1	Risk management policies or procedures have not been prepared.	Create risk management procedures and policies to be included in AMP. Ensure policy includes risk reviewing procedure.
	Risks are documented in a risk register and treatment plans are actioned and monitored	1	Risks register has not been prepared and treatment plans have not been developed.	Action current risks identified in AMP and create procedure for monitoring.
	The probability and consequences of asset failure are regularly assessed	1	Informally completed by staff by subjective judgement. Asset failure risks have not been formally assessed or documented.	Create and document risk register including the treatment and consequences of asset failure. Include in AMP.
Contingency Planning	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	1	“Emergency Response” is briefly addressed in the AMP. Contingency plans have not been prepared.	Prepare a contingency plan for each asset group, document in the AMP and test for high risks.



Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
Financial planning	The financial plan states the financial objectives and strategies and actions to achieve the objectives	3	Well covered in the Plan of Principal Activities (PPA) and in summary in the AMP. AMP needs to include the relevant objectives, strategies and actions from the PPA.	Update the financial plan objectives, strategies and actions and develop a review procedure.
	The financial plan identifies the source of funds for capital expenditure and recurrent costs	3	Included in the AMP for 2003/04. Financial Plan in AMP needs to be expanded to cover 5 year funding projections.	Update the financial plan to include more detail of sources of current and forecast funds for capital expenditure and recurrent costs.
	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	3	AMP contains a profit and loss summary for 2003/04, but no information of projected statements.	Update and expand the financial plan in the AMP to include more detail of financial position and projections for the next five years.
	The financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period	3	Included in the PPA and annual budgets. AMP does not include any income predictions.	Update the 5 year financial plan in the AMP and include predicted costs for operation, maintenance and capital upgrade.
	Significant variances in actual/budget income and expenses are identified and corrective action taken where necessary	2	Variances indicated in the 2003/04 summary, but not detail provided on reasons or any corrective actions. Variations beyond 2003/04 have not been detailed.	Include a commentary in the Financial Plan section of the AMP to explain the reasons for variations in budget and actual expenditures and incomes.



Asset Management Process	Effectiveness Criteria	Compliance Rating	Non-Compliance Issue	Recommended Action
Capital Expenditure Planning	There is an adequate process to ensure that the capital expenditure plan is regularly updated and actioned	2	The capital expenditure plan in the AMP finished in 2008 and has not been regularly reviewed. The Shire does include capital expenditure review as part of the annual budget review process.	Update current capital expenditure plan and develop a review procedure. Include in AMP.
Review of AMS	A review process is in place to ensure that the asset management plan and the asset management system described therein are kept current	2	The AMP was revised in 2004 and contains out of date information. A review process has not been implemented. The Shire does not have an AMIS to monitor and document operations and maintenance activities and tasks, asset performance or asset expenditures.	Create asset management review procedure to ensure system is reviewed regularly. Expand and implement existing AMS to include manuals, policies and procedures for sewer system. Update to AMP to include the missing information identified in this table and update the financial expenditures.



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 and performance aspects of the Operating Licence and Asset Management System should provide the Shire with an assurance that the wastewater system can continue to perform effectively. The implementation of an Asset Management System software would assist in the recording of works activities and developing predictive capital and maintenance requirements.

The primary concerns are the lack of a documented risk assessment and management system and the lack of regular reviews of the Asset Management Plan.

5.4 Compliance Statement

Cecil Hensley has performed this audit/review and prepared this report for the Shire with the assistance of James Alexander.

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 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)

Table 11 Operational Post-Audit Implementation Plan

Clause	Recommendation Action	Responsible Position	Date Action to be Completed
Asset management system - Clause 6			
(a) The Licensee is to:	Expand, update and implement existing AMS to include manuals, policies and procedures for sewer system.	Environmental Health Officer	30 October 2010
(i) provide for an asset management system in respect of the Licensee's Water Service Assets;			
(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.			
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.	Immediately gather and submit require information set out in Schedule 5 to the current Licence to the Authority.	Environmental Health Officer	30 October 2009



<p>Customer Service Charter – Clause 19</p> <p>(g) The Licensee must make the Customer Service Charter available to its Customers in the following ways:</p> <p>(i) by prominently displaying it in those parts of the Licensee's offices to which Customers regularly have access;</p> <p>(ii) by providing a copy, upon request, and at no charge, to a Customer; and</p> <p>(iii) by advising Customers of the availability of the Customer Service Charter on an annual basis.</p>	<p>Ensure the customer service charter is available at request and displayed at reception. Advise customers of the availability of the charter at least once every year.</p>	<p>Environmental Health Officer</p>	<p>30 October 2010</p>
<p>Dispute resolution - Clause 20</p> <p>a) The Licensee shall establish a system for recording, managing and resolving within 21 days Complaints by Customers regarding a provided or requested water service, or for matters which must be considered by Council, within 7 days after the first ordinary Council meeting following the expiry of the 21 day period.</p> <p>(b) To ensure the effectiveness of such a process the Licensee shall, as a minimum:</p> <p>(iii) make such arrangements as are necessary to ensure that if possible Complaints can be resolved in the timeframes set out in subclause (a).</p>	<p>Create and implement a formal compliant resolution procedure with the objective to resolve complaints within the required timeframe. Include in the Charter.</p>	<p>Environmental Health Officer</p>	<p>30 October 2010</p>

Table 12 Asset Management System Post-Audit Implementation Plan

Asset Management Process	Recommended Action	Responsible position	Date action to be completed
<p>Asset Planning</p>	<p>Identify and document asset objectives and lifecycle costs for all assets and include in AMP.</p> <hr/> <p>Include a section in the AMP on cost justification and discussion on cost drivers.</p> <hr/> <p>Identify and document likelihood and consequences of asset failure in AMP</p> <hr/> <p>Create and document a review procedure in-line with Authority's guidelines for the AMP.</p>	<p>Environmental Health Officer</p>	<p>30 October 2010</p>



Asset Management Process	Recommended Action	Responsible position	Date action to be completed
Asset Disposal	Create and implement a process for identifying capacity of assets and recording past performance. Include in AMP.	Environmental Health Officer	30 October 2010
	Create and implement replacement strategy for assets and include in AMP.		
Environmental Analysis	Identify, document and apply SWOT analysis to opportunities and threats. Include in AMP.	Environmental Health Officer	30 October 2010
	Identify and document performance requirements for all assets including availability of service and capacity. Include in AMP.		
Asset Operations	Create and implement a regular review procedure for the operational schedule to prioritise tasks based on risk management.	Environmental Health Officer	30 October 2010
	Provide key staff with training in Asset Management Systems.		
Asset Maintenance	Expand the maintenance schedule to include procedures for recording maintenance tasks, performance and condition. Include in AMP.	Environmental Health Officer	30 October 2010
	Identify and document maintenance requirements (emergency, corrective and preventative) for assets and create and implement maintenance schedules. Include in AMP.		
	Undertake risk analysis of maintenance tasks and prioritise maintenance plan based on risk assessment.		



Asset Management Process	Recommended Action	Responsible position	Date action to be completed
Asset Management Information System	Purchase / develop Asset Management software and roll over all asset data to one system.	Environmental Health Officer	30 October 2010
	Create data verification procedure for updating asset data in Asset Management software.		
	Ensure Asset Management Information System can only be accessed by authorised persons.		
	Ensure adequate physical security access controls such as swipe cards are implemented.		
	Create and implement backup procedure for asset data.		
	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.		
	Create and implement procedures for producing regular reports to monitor assets and link to licence obligations.		
Risk Management	Create risk management procedures and policies to be included in AMP.	Environmental Health Officer	30 October 2010
	Ensure policy includes risk review procedure.		
	Document risks and actions. Create a procedure for monitoring and reviewing risk.		
	Create and document risk register including the treatment and consequences of asset failure. Include in AMP.		
Contingency Planning	Prepare a contingency plan for each asset group, document in the AMP and test for high risks.	Environmental Health Officer	30 October 2010



Asset Management Process	Recommended Action	Responsible position	Date action to be completed
Financial Planning	Update current financial plan objectives, strategies and actions and develop a review procedure.	Environmental Health Officer	30 October 2010
	Update the financial plan to include more detail of sources of current and forecast funds for capital expenditure and recurrent costs.		
	Update and expand the financial plan in the AMP to include more detail of financial position and projections for the next five years.		
	Update the 5 year financial plan including predicted costs for operation, maintenance and capital upgrade in AMP.		
	Include a commentary in the Financial Plan section of the AMP to explain the reasons for variations in budget and actual expenditures and incomes.		
Capital Expenditure Planning	Update current capital expenditure plan and develop a review procedure. Include in AMP.	Environmental Health Officer	30 October 2010
Review of AMS	Create asset management review procedure to ensure system is reviewed regularly. Expand and implement existing AMS to include manuals, policies and procedures for sewer system.	Environmental Health Officer	30 October 2010

6.2 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	CI 2(b)	1	C	Low	Strong	5
General duty to provide services	CI 4 (a & b)	2	C	Medium	Strong	4
Regulations prescribing standards of services	CI 5	2	C	Medium	Strong	4
Asset Management System	CI 6 (a – d)	2	A	High	Weak	1
Operational Audit	CI 7 (a – c)	2	C	Medium	Strong	4
Technical Standards	CI 8	1	C	Low	Weak	5
Industry Codes	CI 9	1	C	Low	Weak	5
Accounting Records	CI 10	2	C	Medium	Strong	4
Prices or charges	CI 11	2	C	Medium	Strong	4
Methods or principles to be applied in the provision of Water Services	CI 12 (a – b)	2	B	Medium	Strong	4
Specified information to be provided	CI 14 (a – c) Schedule 3	2	A	High	Weak	1
Performance of functions by the Licensee	CI 15	2	B	Medium	Strong	4
Performance Standards – Sewerage Services	Schedule 2					
Terms and conditions of Customer Contracts	CI 16 (a –b)	NA	NA	NA	NA	NA
Obligations to public authorities and other Licensees	CI 17	2	B	Medium	Strong	4
Consumer consultation	CI 18 (a – b)	1	C	Low	Strong	5
Customer Service Charter	CI 19 (a – h)	1	C	Low	Strong	5
Dispute resolution	CI 20 (a – g)	1	C	Low	Strong	5
Customer Surveys	CI 21	NA	NA	NA	NA	NA



Appendix B

Asset Management System Risk Assessment



Table 14 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
Asset planning	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 Are lifecycle costs of owning and operating assets assessed 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	1	C	Low	Strong	5
Asset creation/ acquisition	Are full project evaluations undertaken for new assets, including comparative assessment of non-asset solution Do evaluations include all life-cycle costs Do projects reflect sound engineering and business decisions Are commissioning tests are documented and complete Are ongoing legal/ environmental/ safety obligations of the asset owner assigned and understood	1	C	Low	Strong	5



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
Asset disposal	<p>Are under-utilised and under-performing assets identified as part of a regular systematic review process</p> <p>Are the reasons for under-utilisation or poor performance critically examined and corrective action or disposal undertaken</p> <p>Are disposal alternatives evaluated</p> <p>There is a replacement strategy for assets</p>	1	C	Low	Weak	5
Environmental analysis	<p>Are opportunities and threats in the system environment assessed</p> <p>Are performance standards (availability of service, capacity, continuity, emergency response, etc) measured and achieved</p> <p>Does Shire comply with statutory and regulatory requirements</p> <p>Does Shire achieve customer service levels</p>	1	C	Low	Weak	5
Asset operations	<p>Are operational policies and procedures documented and linked to service levels required</p> <p>Is risk management applied to prioritise operations tasks</p> <p>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</p> <p>Are operational costs measured and monitored</p> <p>Do staff receive training commensurate with their responsibilities</p>	2	B	Medium	Moderate	4



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
Asset maintenance	<p>Are maintenance policies and procedures documented and linked to service levels required</p> <p>Are regular inspections undertaken of asset performance and condition</p> <p>Are maintenance plans (emergency, corrective and preventative) documented and completed on schedule</p> <p>Are failures analysed and operational/maintenance plans adjusted where necessary</p> <p>Is risk management applied to prioritise maintenance tasks</p> <p>Are maintenance costs measured and monitored</p>	2	B	Medium	Moderate	4
Asset Management Information System	<p>Is system documentation for users and IT operators adequate</p> <p>Are input controls in place, which include appropriate verification and validation of data entered into the system</p> <p>Do logical security access controls appear adequate, such as passwords</p> <p>Do physical security access controls appear adequate</p> <p>Do data backup procedures appear adequate</p> <p>Are key computations related to licensee performance reporting materially accurate</p> <p>Do management reports appear adequate for the licensee to monitor licence obligations</p>	2	B	Medium	Weak	3



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	<p>Do risk management policies and procedures exist and are they applied to minimise internal and external risks associated with the asset management system</p> <p>Are risks documented in a risk register and treatment plans are actioned and monitored</p> <p>Are the probability and consequences of asset failure regularly assessed</p>	2	B	Medium	Moderate	4
Contingency planning	<p>Are contingency plans documented, understood and tested to confirm their operability and to cover higher risks</p>	3	B	High	Moderate	2
Financial planning	<p>Does the financial plan state the financial objectives and strategies and actions to achieve the objectives</p> <p>Does the financial plan identify the source of funds for capital expenditure and recurrent costs</p> <p>Does the financial plan provide projections of operating statements (profit and loss) and statement of financial position (balance sheets)</p> <p>Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period</p> <p>Does the financial plan provide for the operations and maintenance, administration and capital expenditure requirements of the services</p> <p>Are significant variances in actual/budget income and expenses identified and corrective action taken where necessary</p>	2	B	Medium	Moderate	4



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
Capital expenditure planning	<p>Is there a capital expenditure plan that covers issues to be addressed, actions proposed, responsibilities and dates</p> <p>Does the plan provide reasons for capital expenditure and timing of expenditure</p> <p>Is the capital expenditure plan consistent with the asset life and condition identified in the asset management plan</p> <p>Is there an adequate process to ensure that the capital expenditure plan is regularly updated and actioned</p>	3	C	High	Moderate	2
Review of AMS	<p>Is a review process in place to ensure that the asset management plan and the asset management system described therein are kept current</p> <p>Are independent reviews (eg internal audit) performed of the asset management system</p>	2	A	High	Moderate	2

The following criteria for the Shire should be 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

Table 15 Consequence Ratings

Rating	Supply quality	Examples Of Non-Compliance		
		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 16 Likelihood Ratings

Level	Criteria
A Likely	Non-compliance is expected to occur at least once or twice a year
B Probable	Non-compliance is expected to occur once every three years
C 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 Risk	High	Audit priority 1	Audit priority 2	
	Medium	Audit priority 3	Audit priority 4	
	Low	Audit priority 5		



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2	J Alexander	M Bourhill	<i>M Bourhill</i>	S Henderson	<i>S Henderson</i>	21/08/2009
3	K Patel	M Bourhill	<i>M Bourhill</i>	M Bourhill	<i>M Bourhill</i>	30/9/2009