

Shire of Yilgarn

Audit Report

Operational Audit and Asset Management Review Water Services Licence

January 2006



Quantum
consulting australia

chartered accountants

level 2, 231 adelaide terrace, perth 6000, po box y3499 perth 6832

phone: 08 9325 3233 fax: 08 9325 2311

email: mail@quantumconsulting.net.au www.quantumconsulting.net.au

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
1. BACKGROUND	9
2. AUDIT APPROACH	10
2.1 OBJECTIVES AND SCOPE	10
2.2 AUDIT PERIOD AND TIMING	10
2.3 LICENSEE’S REPRESENTATIVES PARTICIPATING IN THE AUDIT	10
2.4 KEY DOCUMENTS EXAMINED	11
2.5 COMPLIANCE RATINGS	11
2.6 EFFECTIVENESS RATINGS	11
2.7 AUDIT TEAM AND HOURS	12
3. OPERATIONAL AUDIT	13
3.1 SUMMARY OF COMPLIANCE RATINGS	13
3.2 PREVIOUS AUDIT RECOMMENDATIONS	14
3.3 AUDIT RESULTS AND RECOMMENDATIONS	15
3.4 INTEGRITY OF PERFORMANCE REPORTING	24
3.5 RECOMMENDED CHANGES TO THE LICENCE	24
3.6 CONCLUSION	24
4. ASSET MANAGEMENT REVIEW	25
4.1 SUMMARY OF EFFECTIVENESS RATINGS	26
4.2 PREVIOUS AUDIT RECOMMENDATIONS	27
4.2 AUDIT RESULTS AND RECOMMENDATIONS	28
4.3 CONCLUSION	42

Executive Summary

INTRODUCTION

The Shire has a water services licence issued by the Economic Regulation Authority to provide non-potable water supplies and sewerage services to the towns of Southern Cross (370km east of Perth) and Marvel Loch (38km south of Southern Cross).

The system at Southern Cross services approximately 464 properties including the hospital and caravan park. The Marvel Loch system now services less than 130 properties. The two systems both utilise piped gravity collection of sewerage flows, which are piped to conventional oxidisation ponds.

This audit comprised an Operational Audit of the Shire's compliance with the licence conditions and a review of the Asset Management System.

The objective of the Operational Audit was to provide an assessment of the effectiveness of measures taken by the licensee to maintain the performance and quality standards referred to in the licence.

The objective of the Asset Management Review was to assess the adequacy and effectiveness of the asset management system in place for the planning, construction, operation and maintenance of the licensee's assets.

The audit applied a risk-based audit approach to focus on the systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes required by the licence.

The audit covered the three years from the previous audit being 1 December 2002 to 30 November 2005.

CONCLUSION

Operational Audit

Audit review of the systems for compliance with the licence obligations, shows that generally there are good controls to ensure compliance with the licence. There are a few key issues that have been outstanding since the previous audit three years ago, although action is occurring to resolve these issues.

The most pressing issue is the necessity for the Shire to obtain certification from the Department of Environment for operating a wastewater treatment plant and it was noted that this is currently underway.

Review of the complaints/incident register shows that the Shire is very responsive to any problems with the sewerage scheme and deals with them quickly and efficiently given the constraints that country towns can face.

The Shire should also ensure it reports in a timely manner on incidents and for annual performance reporting as specified in the licence conditions.

Asset Management Review

The new treatment plant should be of great benefit to the Southern Cross community with the increased supply of better quality waste water for public areas. This is consistent with the Shire's intent to invest in the town's infrastructure for the benefit of the town residents.

The review of the asset management system shows that base practices are in place and in most areas, the processes are planned and tracked. The main exceptions relate to the areas of formalising risk management, more detailed contingency planning, and documenting procedures for review and updating of the Asset Management Plan. These improvements would help to reduce the risk of reliance on key people for the continued effective operation of the asset management system. A risk analysis would also help to

identify specific risks that warrant further resources being allocated to ensure that the Shire is well-prepared for any potential disruptions to waste treatment services.

SUMMARY OF ISSUES AND RECOMMENDATIONS

The following table provides a summary of the issues and recommendations for the operational audit and asset management review. The recommendations include suggested improvements to the existing controls and Asset Management system to improve the effectiveness and reliability of the controls and systems.

SIGN-OFF

We confirm that the Economic Regulation Authority's Audit Guidelines have been complied with in the conduct of this audit and the preparation of the report, and that the audit findings reflect our professional opinion.

G. White

GEOFF WHITE

PARTNER

31 JANUARY 2006

Summary of Issues and Recommendations

No.	Issue	Recommendation	Management Response
1	Operational Audit		
1.1	<p>CI.17 Obligations to Other Licences Adhered to</p> <p>The Shire does not yet have a licence from the Department of Environment for operating a wastewater treatment plant but is in the process of applying for one.</p> <p>This is still outstanding from the previous audit.</p>	Audit recommends that the licence be obtained as soon as possible.	To be advised by Shire of Yilgarn
1.2	<p>CI.15 (b) Non-Potable Water – Health directions</p> <p>Warning signs have been prepared but had not yet been erected and annual advice is not yet provided to residents, such as in the annual Shire calendar.</p> <p>This is still outstanding from the previous audit.</p>	Audit recommends that the Shire ensures the signs are installed as soon as possible and that the annual notice be included prominently in the calendar.	
1.3	<p>CI.12(a) Contractors Maintenance of Standards</p> <p>The current contractors should be asked to sign the Contractor Checklist kept in the Asset Management Plan for compliance with the Shire's OHS policy.</p>	Audit recommends that the contractor OSH checklists be reviewed and signed by both primary contractors as soon as possible.	
1.4	<p>CI.19 Customer Charter</p> <p>The Customer Charters has not yet been reviewed every three years as required by the licence.</p> <p>The Shire notes the availability of the Charter in their annual report.</p>	<p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ The Customer Service Charter be reviewed and updated if necessary (required every 3 years); and ▪ The Shire increase accessibility of the Charter by making the Customer Charter available to customers on their website. 	

No.	Issue	Recommendation	Management Response
1.5	<p>CI.18 Customer Consultation</p> <p>The Shire is in the process of implementing a new wastewater treatment work. We understand that there has not been any formal customer consultation regarding the changes.</p>	<p>Audit recommends that the Shire considers advertising for written submissions or conducting other public consultation in respect of the new system for waste water treatment to ensure that customers are fully-informed of the changes and can have an opportunity to raise any concerns about the proposed system.</p>	<p>To be advised by Shire of Yilgarn</p>
1.6	<p>CI.14(a) – Incident Reporting</p> <p>Two overflows occurred during the 2003/2004 period, these were reported in the annual reporting but not also within five days of their occurrence as required by their licence.</p>	<p>Audit recommends that in future any incidents of overflow are reported to the Authority within 5 days of their occurrence.</p>	
1.7	<p>CI14(c) – Annual Performance Reporting</p> <p>A report has not yet been completed for the 2004/2005 period. It was due at the end of July 2005.</p>	<p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ A spreadsheet is created to aid in the annual performance reporting process and that documentation is created to explain where and how to source the required information; and copies of the source information are kept to allow easier checking of the validity of the results; and ▪ The Shire should complete their 2004/2005 performance report immediately and in the future ensure that they provide their annual performance reports to the Authority within 30 days of the end of each financial year as per the requirement in the operating licence. 	
2	<p>Asset Management Review</p>		
2.1	<p>Asset Planning</p> <p>The Asset Management Plan does not include any explicitly listed objectives.</p>	<p>Audit recommends that the Asset Management Plan is updated to include realistic and detailed strategic objectives for the sewerage scheme assets along with solid performance indicators that can measure current achievement against those objectives.</p>	

No.	Issue	Recommendation	Management Response
2.2	<p>Asset Disposal</p> <p>There is no formal Asset Disposal Plan.</p>	<p>Audit recommends that the Shire include a section on disposal in the Asset Management Plan. It could include:</p> <ul style="list-style-type: none"> ▪ A list, in priority order, of the assets identified for disposal; ▪ When the disposal will occur; ▪ Identification of any associated costs which may need to be incurred in order to dispose of assets; ▪ A quantification of the expected returns on sale; ▪ Detail on the amount of funds available from disposal for reinvestment in capital works; and ▪ Further information as required to meet annual reporting and budget forecasting requirements. 	To be advised by Shire of Yilgarn
2.3	<p>Environmental Analysis</p> <p>No opportunities or threats have been separately identified in the Asset Management Plan as such.</p>	<p>Audit recommends that opportunities and threats, such as population growth or decline should be identified and included in the Asset Management Plan.</p>	
2.4	<p>Risk Management</p> <p>A partial and informal risk assessment has been performed.</p>	<p>Audit recommends that a more formal risk assessment approach is conducted. The approach need not be too complicated but should include the following steps:</p> <ul style="list-style-type: none"> ▪ Identify potential risks for the asset and its operations; ▪ Assess the likelihood of each risk as likely, possible or unlikely; ▪ Assess the consequences as minor, moderate or major; ▪ Calculate the risk as high, medium or low based on the likelihood and consequences of each risk; ▪ Identify the controls in place to mitigate the risks given their level and whether they are adequate; ▪ Identify and implement suitable actions to deal with inadequate controls; and ▪ Review risks on a regular basis for any changes and update accordingly. 	
2.5	<p>Contingency Plans</p>		

No.	Issue	Recommendation	Management Response
	<p>There are basic contingency planning and procedures outlined in the Operational Planning section of the Asset Management Plan, but these are over-reliant on individual knowledge. Contingency plans need to be clear enough for someone not directly involved in the day to day operations to be able to successfully action the plan.</p> <p>The contingency plans have not been tested.</p>	<p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ The Shire first needs to perform the risk assessment outlined in 2.4, the risks identified as medium and high should then have greater detail in the contingency plan. ▪ The additional detail needed includes: <ul style="list-style-type: none"> ○ Detailed procedures; ○ Key local contact details – name, number and location; ○ Communication protocols; ○ Specifications, location and availability of emergency equipment; and ○ Authorities that need to be contacted and when; and ▪ Contingency plans are tested on at least an annual basis or whenever major changes are required to the plans. 	<p>To be advised by Shire of Yilgarn</p>
2.6	<p>Asset Management Plan</p> <p>Some plans were found to be inaccurate. This was a result of the final implementation differing from the initial plans.</p>	<p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ The plans be updated for any changes between the actual installations and the original plans; and ▪ In the future any deviations from the original specifications should be included in any plans of the assets. 	
2.7	<p>Asset Register</p> <p>The Asset Register requires more detail, it currently provides an overview only.</p>	<p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ The Asset Register provide more detail of the components in the Pump Stations and Wastewater Treatment Plants; ▪ The Asset Condition and Importance Levels have been ascertained for Marvel Loch but not for Southern Cross. The Asset Register should be updated to have these completed 	

No.	Issue	Recommendation	Management Response
		<p>as well.</p> <ul style="list-style-type: none"> ▪ It would also be of benefit to include the location in GPS coordinates of key parts of the mains such as manholes, junctions and valves for future reference. 	
2.8	<p>Operational Plans</p> <p>The Asset Management Plan includes a section on Operational Planning. This forms an overview of the operations of the system only. There are no in-depth operational procedures on how to operate plant or machinery.</p>	<p>Audit recommends that operational procedures on how to operate the plant and machinery are developed.</p>	<p>To be advised by Shire of Yilgarn</p>
2.9	<p>Capital Expenditure Plan</p> <p>The Capital Expenditure Plan in the Shire's Principal Activities plan document is quite succinct. It includes the following:</p> <ul style="list-style-type: none"> ▪ A brief description of the need for the Sewerage Scheme Reserve; ▪ The objective of the Reserve; ▪ The performance measure; ▪ The source of the funding; ▪ A schedule of expenditure and reserve transfers; and ▪ A note on the target size of the reserve. 	<p>Audit recommends that the Capital Expenditure Plan include some more explanatory detail on the timing and justification on why the expenditure is required and the adequacy of the reserve for future needs.</p>	
2.10	<p>Review</p> <p>There is currently no evidence of a formal process in place to ensure that the Asset Management Plan is kept up to date. The plans were recently been updated by SMEC in May 2005, the previous version was dated December 1999.</p>	<p>Audit recommends that the Asset Management Plan is updated to include a section on the review process, when it occurs and what it is required to ensure the process is completed adequately.</p>	

1. Background

The Shire of Yilgarn (“the Shire”) has a licence from the Economic Regulation Authority to provide non-potable water services and sewerage services for the towns of Southern Cross (370km east of Perth) and Marvel Loch (38km south of Southern Cross).

The system at Southern Cross services approximately 464 properties including the hospital and caravan park. The Marvel Loch system now services less than 130 properties. The two systems both utilise piped gravity collection of sewerage flows, which are piped to conventional oxidisation ponds.

The Southern Cross scheme was established in 1983 and expanded in 1987 and 1999. The Marvel Loch scheme was established in 1994.

Effluent disposal is by a combination of evaporation from the ponds and irrigation of recreational areas. Whilst collected flows are of raw sewerage at Southern Cross, those from Marvel Loch are of settled effluent from septic tanks located on each property serviced.

The Shire is in the process of implementing the first stage of a new sewerage treatment facility that will replace the existing oxidisation plants. With the help of its inventor, a Japanese Professor, the facility will be implemented in stages over the next three years. The completed facility when finished will consist of three large enclosed rectangular tanks that through the use of pumped air and fibre optic lighting accelerates the oxidisation process as the waste passes through a series of chambers within each tank. Every few years, the tanks require drying out and the resulting solids disposed of. The result of the new treatment plant should be clearer and cleaner water and less evaporation.

One of the mine sites near Marvel Loch has recently closed down resulting in a decrease of the current population of the town and consequently reduced demand on the sewerage system.

The Shire was initially granted an Operating Licence under the Water Services Coordination Act 1995 by the Western Australian Coordinator of Water Services on the 21st of May 1997 for the operation of water services (sewerage) at Southern Cross and Marvel Loch. The licence was renewed by way of substitution, on the 14th of June 2002. On the 30th of November 2004 the Economic Regulation Authority took over the responsibility of licence monitoring and issued by way of substitution a replacement licence.

The Shire is in the process of applying for a wastewater treatment licence from the Department of Environment (formerly the Department of Environmental Protection).

The Shire engages local Electricians and Plumbers to service, repair and maintain electrical installations and the gravity collection and pumped delivery pipe systems. A specialist pumping company provides inspection, maintenance and repair services for the pumping installations in the systems.

General day-to-day inspection, operation and administration of the systems is provided by the Shire’s Manager, Environmental Health and Building Services.

Notwithstanding its contract with private contractors for operation of the sewerage services, the Shire of Yilgarn remains responsible for delivery of the services in accordance with the licence – under conditions imposed by clause 12(a).

2. Audit Approach

2.1 OBJECTIVES AND SCOPE

2.1.1 Operational Audit

The objective of the Operational Audit was to provide an assessment of the effectiveness of measures taken by the licensee to maintain the performance and quality standards referred to in the licence.

The audit applied a risk-based audit approach to focus on the systems and effectiveness of processes used to ensure compliance with the standards, outputs and outcomes required by the licence.

The scope of the audit covered the following:

- Risk assessment – the risks posed by non-compliance with the licence standards and development of a risk-based audit plan to focus on the higher risk areas, with less intensive coverage of medium and low risk areas;
- Process compliance - the effectiveness of systems and procedures in place throughout the audit period, including the adequacy of internal controls;
- Outcome compliance – the actual performance against standards prescribed in the licence throughout the audit period;
- Output compliance – the existence of the output from systems and procedures throughout the audit period (that is, proper records exist to provide assurance that procedures are being consistently followed and controls are being maintained);
- Integrity of performance reporting – the completeness and accuracy of the performance reporting to the Authority; and
- Compliance with any individual licence conditions – any specific requirements imposed by the Authority or specific issues for follow-up that are advised by the Authority.

2.1.2 Asset Management Review

The objective of the Asset Management Review was to assess the adequacy and effectiveness of the asset management system in place for the planning, construction, operation and maintenance of the licensee's assets.

The scope of the review covered the following:

- the adequacy of the asset management system by considering the outputs of the system such as the operations and maintenance plans, financial plans and asset registers; and
- the effectiveness of the asset management system by considering the systems established for the planning, construction, operation and maintenance of works.

The review identified areas where improvement is required and recommended corrective action as necessary.

2.2 AUDIT PERIOD AND TIMING

The audit covered the period since the previous three-yearly audit, namely 1 December 2002 to 30 November 2005. The field audit visit was conducted on 21 - 22 December 2005.

2.3 LICENSEE'S REPRESENTATIVES PARTICIPATING IN THE AUDIT

- Wendy Dallywater – Manager, Environmental Health & Building Services

- Adam M. Seiler – Deputy Chief Executive Officer

2.4 KEY DOCUMENTS EXAMINED

- Shire of Yilgarn Operating Licence dated 30/11/2004
- Shire of Yilgarn Operating Licence dated 14/6/2002
- Report on Operational Audit and Asset Management Review for the period October 1999 to October 2002
- Performance Reports to ERA for 2003 and 2004
- Customer Service Charter
- Asset Management Plans for Southern Cross and Marvel Loch – prepared by SMEC Australia and Dated December 1999
- Asset Management Plans for Southern Cross and Marvel Loch – prepared by SMEC Australia and Dated May 2005
- Shire of Yilgarn, Principal Activities Plan 2005/2006 to 2008/2009 – Draft
- Shire of Yilgarn, Minutes – Ordinary Meeting of Council, 15th July 2005
- Shire of Yilgarn, Budget 2005-2006
- Shire of Yilgarn, Strategic Plan “2006 and into the future”
- Shire of Yilgarn, Annual Report to the 30 June 2005
- Records of fault advice/ complaints
- Correspondence and Operations files as requested

2.5 COMPLIANCE RATINGS

The Shire’s compliance with the licence obligations was assessed using the following compliance ratings.

NAME	RATING	DESCRIPTION
FULLY COMPLIANT	5	Compliant - no further action required
COMPLIANT	4	Compliant apart from minor issues and recommendations
PARTIALLY COMPLIANT	3	Meets minimum requirements in most areas but improvements are required to maintain compliance
NON-COMPLIANT	2	Does not meet minimum requirements
SIGNIFICANTLY NON-COMPLIANT	1	Significant weaknesses and/or serious action required

2.6 EFFECTIVENESS RATINGS

The effectiveness of key processes in the asset management system was assessed using the following effectiveness ratings.

NAME	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	No process in place

2.7 AUDIT TEAM AND HOURS

CONSULTANT	POSITION	HOURS
Geoff White	Partner	8
Shane Gallagher	Consultant	25
	Total	33

3. Operational Audit

The preliminary risk assessment included in the Audit Plan was reviewed and updated in the course of the audit and a compliance rating using the scale in section 2.5 was assigned to each obligation under the licence, as shown in Section 3.1.

Section 3.2 provides details of the current status of key recommendations from the previous audit.

Section 3.3 provides further details of the systems and the compliance assessment for each obligation.

3.1 SUMMARY OF COMPLIANCE RATINGS

The audit assessment of the compliance ratings for each licence condition is shown in the table below.

Operating area	Operating Licence reference (Cl.=clause, Sch.=schedule)	Consequence (1=minor, 2=moderate, 3=major)	Likelihood (A=likely, B=probable, C=unlikely)	Inherent Risk (Low, Medium, High)	Adequacy of existing controls (S=strong, M=moderate, W=weak)	Compliance Rating (1=significantly non-compliant, 2=non-compliant, 3=partially compliant, 4= compliant, 5=fully compliant)				
						1	2	3	4	5
SERVICE DELIVERY										
Water services in designated areas	Cl.2(b), Sch.1	1	C	Low	Strong					
Availability / connection of services	Cl.12(b)	2	C	Medium	Strong					
Adherence to Regulation	Cl.5	2	C	N/A						
Adherence to Technical Standards	Cl.8	2	C	N/A						
Adherence to industry codes	Cl.9	2	C	Medium	Strong					
Accounting records up to standard	Cl.10	2	C	Medium	Strong					
Pricing/charges adhere to legislation	Cl.11	2	C	Medium	Strong					
Obligations to other licences adhered to	Cl.17	2	C	Medium	Weak					
Emergency telephone service operational	Cl.15(c)	3	C	High	Strong					
Customer service standards	Cl.15(d)(e)	2	C	Medium	Moderate					
Non potable water – health directions	Cl.15(b)	3	C	High	Weak					
Services by agreement	Cl.16	2	C	Medium	Strong					
Contractors maintenance of standards	Cl.12(a)	3	B	High	Weak					
CUSTOMER SERVICE										
Customer complaints	Sch.20	2	B	Medium	Strong					
Customer Charter	Sch.19	2	C	Medium	Moderate					
Customer consultation	Sch.18	2	C	Medium	Moderate					
PERFORMANCE MONITORING										
Customer survey	Cl.21	1	C	N/A						
Incident reporting	Cl.14(a)(b)	2	B	Medium	Weak					
Annual performance reporting	Cl.14(c), Sch.3	1	C	Medium	Weak					
Compliance with reporting standards	Cl.15(a)	1	C	Low	Weak					
INDIVIDUAL STANDARDS	N/A									

3.2 PREVIOUS AUDIT RECOMMENDATIONS

The status of the key recommendations in the previous audit report issued in May 2003 is summarised below.

Item No.	Recommendation	Action Taken	Closed
1	<p>Warning Notices and Advices</p> <p>That the council installs notices at specific irrigation sites and provides written advice annually to customers that treated waste water provided for irrigation of recreational and other areas is not for drinking purposes.</p>	<p>The signs have been printed and are now awaiting installation. The signs warn against drinking the treated water or swimming in the untreated sewerage ponds.</p> <p>The signs for the park and the oval also include more specific warning messages including watering times and contact details for queries.</p> <p>Annual written advice has not been provided at this stage. However a calendar is in the process of being prepared by the council for 2006 by the Manager, Environmental Health & Building Services and the notice shall be included in this.</p>	No
2	<p>Water Treatment Licence</p> <p>That council immediately applies to DEP for treatment Licences to be granted for both the Southern Cross and Marvel Loch treatment facilities.</p>	<p>The council has applied for the treatment licence for both facilities and the application is currently being processed.</p>	No
3	<p>Customer Consultation</p> <p>That a system of customer consultation in accordance with the requirements of the Licence be submitted to the Coordinator for consideration and approval.</p>	<p>Customers can raise matters of concern regarding the sewerage system at the council's public question time.</p>	Yes

3.3 AUDIT RESULTS AND RECOMMENDATIONS

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
CI.2(b), Sch.1	Water Services In Designated Areas 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.	5	Maps are kept with the location of all assets related to the waste water services provided by the Shire of Yilgarn in the towns of Southern Cross and Marvel Loch. These were compared with the operating areas described in Schedule 1 of the Licence. All assets were found to be well within the specified operating areas.	5 Fully compliant
CI.12(b)	Availability and Connection of Services The Licensee shall ensure that its Water Services are available for Connection on request to any land situated in the Operating Area, subject to the applicant meeting any reasonable conditions the Licensee may determine to ensure safe, reliable and financially viable supply of services to land in the Operating Area in accordance with this Licence and any relevant legislation. Satisfactory compliance with the conditions of Connection is an essential requirement of gaining approval to connect to the Licensee's schemes.	4	Discussions with management indicated that the Shire has connected two new customers in the last six years one of which required an extension to connect to the existing system. A new subdivision is being created near the Railway Hotel of approximately 28 lots. This is currently being considered as an extension to the existing Southern Cross sewerage system.	5 Fully compliant
CI.5	Adherence to Regulation The Licensee shall comply with Regulations prescribing standards of service made under section 61 of the Act.	3	No regulations had been published at the time of the audit.	N/A
CI.8	Adherence to Technical Standards 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 <i>Government Gazette</i> .	4	No relevant technical standards had been published in the Government Gazette at the time of the audit.	N/A

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
Cl.9	Adherence to Industry Codes The Licensee shall observe the <i>Sewerage Code of Australia WSA 02 1999</i> in the design and construction of sewerage systems.	4	All the current infrastructure in use was built prior to 1999, the Southern Cross system was established in 1983 and the Marvel Loch system in 1994.	5 Fully compliant
Cl.10	Accounting Records – Prepared to Standard Consistent with the accounting requirements of the <i>Local Government Act 1995</i> , 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.	4	Each year the Shire of Yilgarn prepares a comprehensive Annual Report for the whole of the shire, which is independently audited by a certified auditor. The Asset Management Plan includes operating statements for the financial years up to and including 2003/2004. The Shire's Financial Management Information System (FMIS) has the ability to produce operating statements as per the Water Services licence requirements.	5 Fully compliant
Cl.11	Pricing and Charges – Adhere to Legislation 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.	4	The Sewerage Scheme Rates and Charges for 2005/2006 were approved in the Yilgarn Council Meeting held on the 15 th of July 2005 as evidenced in the minutes for that meeting. Prices and charges are listed for each class of customer.	5 Fully compliant
Cl.17	Obligations to Other Licences Adhered to Wastewater treatment plants operated by the Licensee shall have relevant Licences from the Department of Environment and be operated in compliance with those Licences.	4	The Shire does not have a licence from the Department of Environment yet, but is in the process of applying for one. Audit recommends that the licence be obtained as soon as possible.	2 Non-compliant
Cl.15(c)	Emergency Telephone Service Operational 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	2	An emergency telephone service is operated by the Shire. During office hours, customers can contact the shire office. Out of hours, an answering machine gives the home number and mobile number (CDMA phone) of the Manager, Environmental Health & Building Services. These numbers are also included in the Customer Charter provided to customers. The Manager, Environmental Health & Building Services acts immediately on	5 Fully compliant

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
	environment or property.		receiving a call and responds as required.	
Cl.15(d), Cl.15(e)	<p>Customer Service Standards</p> <p>The Licensee shall maintain and operate its sewerage scheme so that sewerage does not overflow on Customers' properties.</p> <p>The Licensee shall maintain and operate its sewerage scheme so that sewer blockages are minimised.</p>	4	One overflow occurred since the last audit where sewerage overflowed onto a customer's property. A manhole had problems with a tree root. This caused water to come up and out onto another property. The problem was actioned as soon as the Shire became aware of it. The area has been monitored in case the tree root problem re-occurs.	4 Compliant with minor issues
Cl.15(b)	<p>Non-potable Water – Health Directions</p> <p>The Licensee shall provide annual notification to all Customers provided with non-potable water that the water supplied is not suitable for drinking.</p>	2	<p>Warning signs have been printed for placement at specific wastewater sites and are now awaiting installation. The signs warn against drinking the treated water or swimming in the untreated sewerage ponds.</p> <p>The signs for the park and the oval also include more specific warning messages including watering times and contact details for queries.</p> <p>Annual written advice has not been provided to Licensees at this stage. However a calendar is in the process of being developed by the Shire for 2006 by the Manager, Environmental Health & Building Services to be distributed to all shire residents.</p> <p>Audit recommends that the Shire ensures the signs are installed as soon as possible and that the annual notice be included prominently in the calendar.</p>	3 Partially compliant
Cl.16	<p>Services by Agreement</p> <p>The Licensee may enter into agreements with Customers to provide Water Services.</p> <p>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 Authority.</p>	4	A standard agreement is used by the shire. All customers use the same standard agreement.	5 Fully compliant

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
CI.12(a)	<p>Contractors Maintenance of Standards</p> <p>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.</p>	2	<p>Two primary contractors are used for maintenance and repairs, the local plumber and electrician. The Occupational Health and Safety (OHS) manual in the Asset Management Plan includes a contractor checklist for compliance with the Shire's OHS policy. Copies signed by either contractor could not be found.</p> <p>Audit recommends that the contractor OSH checklists be reviewed and signed by both primary contractors as soon as possible.</p>	3 Partially compliant
CI.20	<p>Customer Complaints</p> <p>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>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> <p>(ii) provide an officer trained to deal with Customer Complaints who is authorised to, or has access to another officer who has the authority to, make the necessary decisions to settle Customer Complaints or disputes, and where applicable, make recommendations to Council as to the payment of monetary compensation; and</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>	3	<p>The Shire has a system for recording, managing and resolving complaints.</p> <p>A handwritten register is kept of complaints and incidents. It records:</p> <ul style="list-style-type: none"> ▪ Date and time the complaint was received; ▪ Name of the complainant; ▪ Who received the complaint; ▪ Method of complaint; ▪ Details of the complaint; ▪ Time from report of the complaint to action; ▪ Details of the action taken; ▪ Name of person authorising; and ▪ Date/ time responded. <p>The Manager, Environmental Health & Building Services is authorised to respond to customer complaints or incidents and authorise any emergency repairs or maintenance.</p> <p>The Complaint/ Incident Register was inspected, and all complaints and incidents checked in the register were dealt with in a timely matter.</p>	5 Fully compliant

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
CI.19	<p>Customer Charter</p> <p>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')</p> <p>The Customer Service Charter must be submitted to the Authority for its approval by 1 December 1997. The Authority may require changes to be made to the charter.</p> <p>The Customer Service Charter:</p> <ul style="list-style-type: none"> (i) should be drafted in 'plain English'; and (ii) should address all of the service issues that are reasonably likely to be of concern to its Customers. <p>Different parts of the Customer Service Charter may be expressed to apply to different classes of Customers.</p> <p>The Licensee shall review the Customer Service Charter not less than once in every period of 36 months.</p> <p>Any proposed amendment to the Customer Service Charter or replacement thereof must also be forwarded to the Authority for approval prior to implementation.</p> <p>The Licensee must make the Customer Service Charter available to its Customers in the following ways:</p> <ul style="list-style-type: none"> (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 	<p>3</p>	<p>The Licensee has a Customer Service Charter in place.</p> <p>The Licensee's Customer Service Charter has been approved, and issued. The Charter is available from the front desk of the Shire office or available on request to Customers.</p> <p>The Customer Service Charter is now due for review. The Manager, Environmental Health & Building Services should review the document and submit it for re-approval by the Council. If any amendments are required then the updated Customer Service Charter should be forwarded to the Authority.</p> <p>Availability of the Customer Service Charter is mentioned in the Shire's Annual Report.</p> <p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ The Customer Service Charter be reviewed and updated if necessary (required every 3 years); and ▪ The Shire increase accessibility of the Charter by making the Customer Charter available to customers on their website. 	<p>4</p> <p>Compliant with minor issues</p>

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
	charge, to a Customer; and (iii) by advising Customers of the availability of the Customer Service Charter on an annual basis. It is a condition of the Licence that the Licensee provides services in a way that is materially consistent with its Customer Service Charter.			
Cl.18	Customer Consultation Prior to making major changes to the operation of a water service, such as the construction of new wastewater treatment works or significant expansion of the sewerage network, the Licensee will: (i) hold a public meeting to obtain Customer views on the performance and operation of the scheme; or (ii) advertise for written submissions on the proposal. The Licensee shall allow Customers to raise matters of concern regarding the sewerage system at public question time in accordance with the <i>Local Government Act 1995</i> .	3	The first stage of an improved treatment system for the waste that will replace the existing ponds is nearing completion for Southern Cross. The remaining two stages will be implemented over the next two years. It is expected that the new system will provide a superior filtration of the waste water and also result in less evaporation of the treated water that is then used as a non-potable source for the town. From discussions with the Shire, it was found that no specific customer consultations had been completed on the system at the time of the audit. The Shire Council meets on the third Friday of each month. The meetings are open to the public and a 15-minute Public Question Time is scheduled at the beginning of each meeting, giving customers the opportunity to raise matters of concern regarding the sewerage system. Audit recommends that the Shire considers advertising for written submissions or conducting other public consultation in respect of the new system for waste water treatment to ensure that customers are fully-informed of the changes and can have an opportunity to raise any concerns about the proposed system.	3 Partially compliant
Cl.21	Customer Survey	5	The Shire had not been requested to commission a survey by the Authority at the time of the audit.	N/A

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
	<p>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.</p> <p>Such a survey will not be required more frequently than once every 12 months.</p>			
<p>CI.14(a), CI.14(b)</p>	<p>Incident Reporting</p> <p>The Licensee shall inform the Authority of the occurrence of any of the following events within five days of their occurrence:</p> <ul style="list-style-type: none"> - overflows from wastewater/ sewerage infrastructure, including wastewater treatment plants, pumping stations etc. <p>The Authority may require a detailed report on these events to be provided within 14 days of the request.</p>	4	<p>Although an inspection of the Incident/ Complaint Register showed two overflows occurred during the 2003/2004 period, the incidents were only reported as part of the annual reporting process, not within five days of their occurrence as per CI.14(a) of the Operating Licence.</p> <p>The Licensee was unaware of this requirement, but should endeavour to meet this requirement in the future.</p> <p>Audit recommends that in future any incidents of overflow are reported to the Authority within 5 days of their occurrence.</p>	<p>2</p> <p>Non-compliant</p>
<p>CI.14(c), Sch 3</p>	<p>Annual Performance Reporting</p> <p>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.</p>	5	<p>The licensee had produced reports as per the requirements of schedule 3 of the licence for the 2002/2003 and 2003/2004 financial years, but at the time of the audit had yet to complete a report for the 2004/2005 year.</p> <p>The information for the reports comes from a variety of sources; as follows:</p> <ul style="list-style-type: none"> ▪ The number of connections remains fairly constant and is calculated manually; ▪ Sewer mains length comes from the plans of the systems and measuring distances on a map; 	<p>2</p> <p>Non-compliant</p>

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
			<ul style="list-style-type: none"> ▪ The volume is calculated by recording the number hours of pump operation multiplied by the pumps potential throughput; ▪ The Wastewater re-use is estimated by factoring the tank capacity and number of days of water usage; and ▪ Energy costs are calculated from the power accounts the Shire receives. <p>All calculations are performed manually.</p> <p>Audit recommends that:</p> <ul style="list-style-type: none"> ▪ A spreadsheet is created to aid in the annual performance reporting process and that documentation is created to explain where and how to source the required information; and copies of the source information are kept to allow easier checking of the validity of the results; and ▪ The Shire should complete their 2004/2005 performance report immediately and in the future ensure that they provide their annual performance reports to the Authority within 30 days of the end of each financial year as per the requirement in the operating licence. 	
CI.15(a)	<p>Compliance with Reporting Standards</p> <p>The Licensee shall comply with the quality and performance standards set out in Schedule 2.</p>	5	<p>The report for the 2003/2004 period did not comply with the performance standards as set out in Schedule 2. Specifically the number of blockages exceeded the performance standard.</p> <p>The Authority requested further information to ensure that corrective and preventative actions were taken by the Licensee to reduce the number of blockages, which the Shire did.</p> <p>The report for the 2002/2003 period did comply with the performance standards as set out in Schedule 3.</p> <p>The report for the 2004/2005 period had not been completed at the time of the audit. It was therefore impossible to ascertain if the</p>	3 Partially compliant

Licence ref.	Licence obligation	Audit priority (1=highest, 5=lowest)	System established to comply with licence obligation (including any potential improvements)	Compliance rating
			Licensee was compliant with the performance standards for the 2004/2005 period. The licensee has been encouraged to complete this and forward to the Authority as soon as possible for their review.	

3.4 INTEGRITY OF PERFORMANCE REPORTING

As the information is collated manually, the performance reporting process needs to be formalised and spreadsheets created and used for calculations and copies of source documents filed and kept together for future checking. The format of the complaints/ incident register is acceptable but other sources of information also need to be kept on record.

The annual performance reports for 2004/05 had not yet been submitted to the Authority. Performance reporting should be completed on time in compliance with the licence requirements.

The audit recommendations are noted in Section 3.3 above.

3.5 RECOMMENDED CHANGES TO THE LICENCE

No changes to the licence are considered necessary.

3.6 CONCLUSION

Audit review of the systems for compliance with the licence obligations, shows that generally there are good controls to ensure compliance with the licence. There are a few key issues that have been outstanding since the previous audit three years ago, although action is occurring to resolve these issues.

The most pressing issue is the necessity for the Shire to obtain certification from the Department of Environment for operating a wastewater treatment plant and it was noted that this is currently underway.

Review of the complaints/incident register shows that the Shire is very responsive to any problems with the sewerage scheme and deals with them quickly and efficiently given the constraints that country towns can face.

The Shire should also ensure it reports in a timely manner on incidents and for annual performance reporting as specified in the licence conditions.

4. Asset Management Review

The effectiveness of the Shire's asset management system for the sewerage schemes was assessed using the AMS Effectiveness Matrix provided by the Authority in the Audit Guidelines.

The matrix provides criteria to assess the effectiveness of the following key processes:

- Asset planning;
- Asset creation/acquisition;
- Asset disposal;
- Environmental analysis;
- Risk management;
- Contingency plans;
- Asset management plan;
- Asset management information system;
- Asset register;
- Operational plans;
- Maintenance plans;
- Financial plans;
- Capital expenditure planning; and
- Review.

The review has assessed the above key processes of the asset management system and a compliance rating using the scale in section 2.6 was assigned to process, as shown in Section 4.1.

Section 4.2 provides details of the current status of key recommendations from the previous review.

Section 4.3 provides further details of the systems and the effectiveness rating for each key process in the asset management system.

4.1 SUMMARY OF EFFECTIVENESS RATINGS

The audit assessment of the effectiveness ratings for each key process in the Shire's asset management system is shown in the table below.

ASSET MANAGEMENT SYSTEM		Asset planning, creation, acquisition and disposal			Environmental analysis, risk analysis and contingency planning			Asset system analysis					Financial and capital expenditure planning		Other		
		Asset Planning	Asset Creation/ Acquisition	Asset Disposal	Environmental Analysis	Risk Management	Contingency plans	Asset Management Plan	Asset Management Info. System	Asset Register	Operational plans	Maintenance plans	Financial Planning	Capital Expenditure Planning	Review		
Key Processes																	
Capability rating																	
5	Continuously improving																
4	Quantitatively controlled																
3	Well defined																
2	Planned and tracked																
1	Performed informally																
0	Not performed																

Section 4.3 provides further details of the systems and the effectiveness rating for each key process in the asset management system.

4.2 PREVIOUS AUDIT RECOMMENDATIONS

The status of the key recommendations in the previous audit report issued in May 2003 is summarised below.

Item No.	Recommendation	Action Taken	Closed
1	That Capital Works Planning and hence Asset Creation processes be reintroduced into the Shire's annual budget for the sewerage systems.	The Capital Works Planning process has been updated in the Asset Management Plan, including projections for the next four years. Additionally provisions have now been included in the Shire's annual budget process specifically for the sewerage systems.	Yes
2	That a protocol be established for a review of the asset management system to be undertaken at two yearly intervals – or following major amendments to the assets, their operational or maintenance practices / requirements.	The Asset Management Plan was revised by SMEC in May 2005. However, the Asset Management Plan still does not include any information on the frequency of when the Asset Management System should be reviewed or what actions should be undertaken as part of the review process.	No
3	That a thorough review of the asset management system be undertaken promptly in order to update the plan to the current period.	The Asset Management Plan was revised by SMEC in May 2005. However, some issues still need to be addressed.	No
4	That the above review include significant improvement in the content and detail of Item 3 – Asset System Analysis (particularly the asset register and operations and maintenance plans) and all aspects of Item 4 – Risk Analysis and Contingency Planning.	Although the Asset Management Plan was revised by SMEC in May 2005, more detail is required as per the recommendation for the Asset System Analysis and Risk Analysis and Contingency Planning.	No

4.2 AUDIT RESULTS AND RECOMMENDATIONS

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
1	ASSET PLANNING		
1.1	Have the strategic objectives for the assets been identified?	<p>The Principal Activities Plan for the Shire includes an objectives section for the Southern Cross and Marvel Loch sewerage schemes. However this is only in regards to the establishment of sufficient reserves for future upgrades and maintenance.</p> <p>The Shire of Yilgarn Strategic Plan does include a goal to “Care for the Environment” with “Promote Waste Management Strategies” as a strategy but it does not specifically refer to sewerage treatment.</p> <p>The Asset Management Plan does not include any explicitly listed objectives and should be updated to include realistic and detailed strategic objectives for the sewerage scheme assets along with solid performance indicators that can measure current achievement against those objectives.</p>	0
1.2	Have life cycle costs been considered?	<p>The Asset Management Plan and Principal Activities Plan both include projected capital spending and required reserve transfers for the next four years. The Asset Register includes the expected life of major asset types such as pipes and pump stations.</p> <p>The Shire is in the process of building up sufficient Capital Works Reserves to ensure it can replace major assets when they are required.</p>	3
1.3	Has the need for new assets been determined and full project evaluation process been followed, including comparative assessment of non-asset solutions?	<p>The need for new assets has been determined. A new waste treatment facility is currently being implemented in three stages over the next two years. Non-asset alternatives were not appropriate in this case.</p>	3

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
1.4	Does the planning process and objectives reflect the needs of all stakeholders?	The Asset Management Plan includes sections on the Asset Environment and levels of service in detail.	4
1.5	Do the resulting projects reflect sound engineering and business decisions?	The current project that the Shire is undertaking to replace the Southern Cross oxidation ponds with a more efficient tank treatment system is expected to have the dual benefits of clearer treated water and much lower evaporation than the current pond system. The benefits to the community would appear in this case to justify the current expenditure on this project.	4
2	ASSET CREATION/ ACQUISITION		
2.1	Have documents recording relevant details on the asset been collected?	Tender documentation is kept along with any plans or diagrams for each major new asset acquired.	3
2.2	Are construction/ contract management processes and responsibilities clear and well documented?	Construction/ contract management is performed as per other Shire activities. Purchase orders must be raised by the Manager, Environmental Health and Building Services.	2
2.3	Do the assets reflect the objectives identified in the asset creation/ acquisition?	Although the objectives have not been formally identified, discussions with management show a match between expectations and the anticipated functionality of the new sewerage treatment plant.	1
2.4	Are the actual costs as predicted?	Discussions with manage reveal that actual costs are as expected for the current project underway.	1
3	ASSET DISPOSAL		

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
3.1	Have surplus, obsolete or under-performing assets identified?	The current Capital Expenditure Plan includes provisions for the replacement of existing aging pumps and a Pump Station Alert system. Additionally under-performing assets may be identified during routine preventative maintenance.	2
3.2	Is there a replacement strategy?	The Shire has established Reserve Funds to allow for asset replacement when it becomes necessary. The reserves are included in the financials for the Shire's Annual Report. The Principal Activities Plan includes further details on the Sewerage Upgrade Reserve.	3
3.3	Has an evaluation of disposal alternatives been completed?	No formal evaluation has been completed, however in the case of the oxidisation ponds that are to be replaced by treatment tanks, it has been decided by the Shire to decommission the ponds and keep the remaining two ponds on standby.	1
3.4	Are damaged or missing assets written-off?	No, items such as replacement pumps are expensed at the time of purchase.	2
3.5	Is there a disposal plan?	There is no formal disposal plan. The Licensee should include a section on disposal in the Asset Management Plan. It could include: <ul style="list-style-type: none"> ▪ A list, in priority order, of the assets identified for disposal; ▪ When the disposal will occur; ▪ Identification of any associated costs which may need to be incurred in order to dispose of assets; ▪ A quantification of the expected returns on sale; ▪ Detail on the amount of funds available from disposal for reinvestment in capital works; and ▪ Further information as required to meet annual reporting and budget forecasting requirements. 	0

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
3.6	Are under-utilised and under-performing assets identified as part of a regular, systematic review process?	Regular preventative maintenance identifies assets that are underperforming. Asset performance was ascertained recently for the current Asset Management Plan dated May 2005.	3
3.7	Are the reasons for under-utilisation or poor performance critically examined and corrective action taken to remedy the situation, or a disposal decision made?	Regular preventative maintenance identifies assets that are underperforming; these are investigated and actioned on where possible by the Manager, Environmental Health & Building Services.	2
4	ENVIRONMENTAL ANALYSIS		
4.1	Have the performance requirements – availability of service, capacity, continuity, emergency response been documented?	<p>The following levels of service are documented in the Asset Management Plan:</p> <ul style="list-style-type: none"> ▪ Availability of service; ▪ Capacity – Reticulation Sewers; ▪ Capacity – Headworks; ▪ Continuity; ▪ Odours; ▪ Emergency Response. 	4
4.2	Are the asset system objectives documented?	Yes, the Asset Management Plan outlines the expectations of each of the system components.	3
4.3	Have opportunities and threats in the system environment been assessed?	<p>No opportunities or threats have been separately identified in the Asset Management Plan as such.</p> <p style="color: red;">Opportunities and threats, such as population growth or decline should be identified and</p>	0

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
		included in the Asset Management Plan.	
4.4	Are regulatory obligations and statutory/regulatory requirements documented?	Yes, the Asset Management plan identifies the following regulatory requirements: <ul style="list-style-type: none"> ▪ Economic Regulation Authority Requirements; ▪ Environmental Protection Authority Requirements; ▪ Department of Environment; ▪ Occupational Health, Safety & Welfare Act Requirements; ▪ Health Act Requirements; and ▪ Local Government Act Requirements. 	3
4.5	Does the asset meet the level of service required by users of the service?	Yes, the asset appears to be in keeping with Shire's statement on its commitment to service.	3
4.6	Do the assets meet regulatory requirements?	The Shire is in the process of applying for a Department of Environment licence.	1
5	RISK MANAGEMENT		
5.1	Has a risk assessment of the asset been conducted?	A partial and informal risk assessment has been performed. A more formal risk assessment approach is recommended. The approach need not be too complicated but should use the following approach: <ul style="list-style-type: none"> ▪ Identify potential risks for the asset and its operations; ▪ Assess the likelihood of each risk as likely, possible or unlikely; ▪ Assess the consequences as minor, moderate or major; ▪ Calculate the risk as high, medium or low based on the likelihood and consequences of each risk; ▪ Identify the controls in place to mitigate the risks given their level and whether they are adequate; ▪ Identify and implement suitable actions to deal with inadequate controls; and 	1

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
		<ul style="list-style-type: none"> Review risks on a regular basis for any changes and update accordingly. 	
5.2	Has the probability and consequences of asset failure been identified?	Individual risks of asset failure have been identified within the Asset Management Plan in the operating rules for breakdowns. The probability and consequences have not been identified. A more formal approach to risk assessment is recommended as described in 5.1.	2
5.3	Is risk management practiced?	Risk management is only performed on an informal basis. A more structured approach is recommended as described in 5.1.	1
5.4	Are risk control measures implemented for risks identified as unacceptable?	A formal risk assessment process is recommended as described in 5.1 to ensure control measures are adequate for risks identified as unacceptable.	1
6	CONTINGENCY PLANS		
6.1	Is there sufficient contingency planning and backup?	There are basic contingency planning and procedures outlined in the Operational Planning section of the Asset Management Plan, but these are over-reliant on individual knowledge. Contingency plans need to be clear enough for someone not directly involved in the day to day operations to be able to successfully action the plan. More detailed contingency plans are recommended.	2
6.2	Is disaster recovery regularly tested?	The contingency plans have not been tested. Contingency plans should be tested on at least an annual basis or whenever major changes are required to the plans.	0
6.3	Are appropriate contingency plans in place?	There are contingency plans in place but they are quite basic and only provide an overview of what should happen. The Shire first needs to perform the risk assessment outlined in 5.1, the risks identified as medium and high should then have greater detail in the contingency plan. The additional detail needed includes:	1

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
		<ul style="list-style-type: none"> ▪ Detailed procedures; ▪ Key local contact details – name, number and location; ▪ Communication protocols; ▪ Specifications, location and availability of emergency equipment; and ▪ Authorities that need to be contacted and when. 	
6.4	Have contingency plans have been developed for events that may result in severe consequences?	Basic plans have been developed but these require more detail as per 6.3.	1
7	ASSET MANAGEMENT PLAN		
7.1	Are the asset system components documented?	The asset system components have been identified but include insufficient detail as to be useful for day to day operations.	1
7.2	Has asset performance and condition been assessed?	<p>The Asset Management Plan includes a description of the condition and performance for the following assets:</p> <ul style="list-style-type: none"> ▪ Collection; ▪ Conveyance; ▪ Wastewater pump stations; and ▪ Wastewater treatment. 	3
7.3	Does the asset management plan include an asset register and plans of asset system components?	<p>Plans have been kept of the asset system components for Southern Cross and Marvel Loch. The Asset Register has been improved since the previous audit but does not provide sufficient detail of assets for the Pump Stations or Wastewater Treatment Plants.</p> <p>The level of detail needs to be increased for the Asset Register to be useful for day to day operations.</p>	1

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
		<p>Also discussions with management suggested that some plans were inaccurate as the implementation is different to the original plans which had not been updated to reflect these differences.</p> <p>In the future any deviations from the original specifications should be included in any plans of the assets.</p>	
7.4	Are systems in place to assess asset and practice efficiency?	No formal systems are in place, however the operations are monitored by the Manager, Environmental Health & Building Services.	1
7.5	Are assets assessed for capability and deficiencies of current assets to meet performance requirements?	Regular maintenance is performed by contractors and any problems or suggestions are forwarded to the Manager, Environmental Health & Building Services.	2
7.6	Are actual assets and human resources appropriate for performance requirements?	<p>The Asset Management Plan prepared by SMEC includes a section on the human resources required to support the plan:</p> <ul style="list-style-type: none"> ▪ Operations Manager; ▪ Shire depot staff for Irrigation Scheme operations; ▪ Pump maintenance contractor; ▪ Contract plumber; and ▪ Contract electrician. <p>Management discussions reveal all these roles were being performed at the time of the audit.</p> <p>The assets seem appropriate for the current levels of demand. Marvel Loch did appear to be having some capacity problems but one of the nearby mines recently closed and so a number of the mining camps have closed lowering the demand on the system.</p>	3

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
7.7	Are assets underutilised?	The assets appear to be adequate and appropriate for the current levels of demand.	3
7.8	Does the asset management plan enable the prediction of asset deterioration and failure and is it appropriate for performance requirements?	The Asset Register includes the expected life of plant and equipment. However this does not provide enough detail on items such as individual pumps in the pumping stations.	1
8	ASSET MANAGEMENT INFORMATION SYSTEM		
8.1	Is there adequate system documentation?	Not applicable – manual procedures only.	0
8.2	Do the input controls include appropriate verification and validation of data entered into the system?	Not applicable.	0
8.3	Are key computations documented and are they accurate?	Not applicable.	0
8.4	Do reports meet management requirements?	Reports are prepared manually as required by the Manager, Environmental Health & Building Services.	1
8.5	Are the logical security access controls such as passwords adequate?	Not applicable.	0
8.6	Are there adequate physical security access controls?	Not applicable.	0
8.7	Are problems with the system tracked and are there management procedures	Not applicable.	0

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
	for follow-up?		
8.8	Is the functionality of the AMIS adequate for the licensee's needs?	The Shire does not have an electronic AMIS. They rely on a manual system for maintaining information about the assets.	1
9	ASSET REGISTER		
9.1	Does the register record asset type, location, material and an assessment of assets' physical/structural condition?	<p>The current Asset Register includes details on:</p> <ul style="list-style-type: none"> ▪ Asset Number; ▪ Description; ▪ Length; ▪ Year Constructed; ▪ Estimated Replacement Cost; ▪ Assumed Economic Life; ▪ Estimated Replacement Year; ▪ Condition; and ▪ Importance Level. <p>However, the register needs to be improved to provide more detail of the components in the Pump Stations and Wastewater Treatment Plants.</p> <p>The Asset Condition and Importance Levels have been ascertained for Marvel Loch but not for Southern Cross. The Asset Register should be updated to have these completed as well.</p> <p>It would also be of benefit to include the location in GPS coordinates of key parts of the mains such as manholes, junctions and valves for future reference.</p>	2
9.2	Is the asset regularly inspected?	Key assets such as pump stations and wastewater treatment plants are regularly	2

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
		inspected and preventative maintenance performed.	
9.3	Is the asset's theoretical life known?	The Asset Register includes the assumed economic life for all assets identified.	2
9.4	Are asset costs measured and recorded?	All assets expenditure is captured in the Shire's Financial Management Information System (FMIS). The Historical Cost information for the assets have not been transferred to the Asset Register.	1
10	OPERATIONAL PLANS		
10.1	Are practices covering operating rules documented?	The Asset Management Plan includes a section on Operational Planning. This forms an overview of the operations of the system only. There are no in-depth operational procedures on how to operate plant or machinery. Operational procedures on how to operate the plant and machinery need to be developed.	2
10.2	Do operational practices reflect performance targets?	Yes, current operational processes appear to reflect performance targets.	2
10.3	Do operational plans relate to what is required to achieve the levels of service required of the system?	As the operational plans cover an overview only, they provide guidance only and are reliant on the knowledge and skills of contractors employed to maintain sufficient levels of service. More prescriptive information is required of operations than there is currently.	2
11	MAINTENANCE PLANS		
11.1	Are practices covering maintenance documented?	The Asset Management Plan includes a section on Maintenance Planning. This is effectively an overview of the maintenance.	1
11.2	Do maintenance plans cover preventative and corrective	The maintenance plans do cover preventative and corrective maintenance, but only as an overview. A maintenance schedule has been prepared and is an Appendix to the Asset Management Plan. This specifies maintenance tasks to be carried out daily,	2

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
	maintenance?	weekly, monthly, two monthly, six monthly, yearly and five yearly. It provides a checklist of maintenance tasks but is reliant on the knowledge and ability of the person performing the maintenance to carry them out satisfactorily.	
11.3	Do maintenance practices reflect performance targets?	Maintenance is regularly performed on assets. Maintenance is carried out by qualified contractors on a regular basis.	2
11.4	Is the level of maintenance justified against replacement costs?	No formal comparisons appear to have been made of maintenance against replacement costs.	1
11.5	Do maintenance plans relate to what is required to achieve the levels of service required of the system?	Maintenance plans do relate to what is required to achieve the levels of service required of the system.	1
12	FINANCIAL PLANNING		
12.1	Does the financial plan provide projections of operating statements (profit and loss) and statement of financial position (balance sheets);	A complete Annual Budget document is completed for each coming financial year for the Shire which includes the Sewerage System and actuals/budget are monitored.	4
12.2	Does the financial plan cover the financial objectives and strategies and actions to achieve the objectives?	The Shire's Strategic Plan looks at the Shire's Direction for the next 5-10 years. The Shire's Principal Activities Plan looks at funding the Shire's operations for the next four years. The Annual budget process takes this and allocates resources to each activity.	2
12.3	Does the financial plan identify the source of funds for the capital expenditure plan?	The Principal Activities Plan identifies the source of funding for the Sewerage Upgrade Reserve as through General Revenue.	4
12.4	Is the source of funds for operations, maintenance and administration identified in the financial plan?	The Asset Management Plan states that operations, maintenance and administration are funded by sewerage rates, and that they are calculated and reviewed annually.	4

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
12.5	Does the financial plan provide firm predictions on income for the next five years and reasonable indicative predictions beyond this period?	The Principal Activities Plan covers operations from 2005/2006 to 2008/2009. This identifies expected capital expenditure and transfers to the Sewerage Upgrade Reserve.	3
12.6	Does the financial plan provide for the operations and maintenance, administration and capital expenditure requirements of the scheme?	The Principal Activities Plan is only concerned with capital expenditure.	3
13	CAPITAL EXPENDITURE PLANNING		
13.1	Has a capital expenditure plan been prepared?	A capital expenditure plan has been prepared. The Principal Activities Plan includes capital expenditure up to the 2008/2009 financial year.	4
13.2	Does the plan cover the issues to be addressed, the actions proposed, the centre of responsibilities, and deadline dates?	<p>The Capital Expenditure Plan in the Shire's Principal Activities plan document is quite succinct. It includes the following:</p> <ul style="list-style-type: none"> ▪ A brief description of the need for the Sewerage Scheme Reserve; ▪ The objective of the Reserve; ▪ The performance measure; ▪ The source of the funding; ▪ A schedule of expenditure and reserve transfers; and ▪ A note on the target size of the reserve. <p>The Capital Expenditure Plan could still benefit with some more explanatory detail on the timing and some more justification on why the expenditure is required and the adequacy of the reserve for future needs.</p>	3
13.3	Does the plan provide reasons for capital expenditure and timing of expenditure?	No detailed reasons are given for capital expenditure in the Capital Expenditure Plan, although the two items listed in the expenditure schedule "Replacement of Ageing Pumps" and "Pump Station Alert System" are fairly self explanatory. The schedule	2

Item no.	Criteria (refer AMS Effectiveness Matrix in Audit Guidelines)	Observations and results (including any potential improvements)	Effectiveness rating (0=no process, 1=base practices, 2=planned & tracked, 3=well-defined, 4=quantitatively controlled, 5=continuously improving)
		shows the timing of the expenditure up to the end of the 2008/2009 financial year.	
13.4	Is the capital expenditure plan consistent with the asset life and condition identified in the asset management plan?	The Capital Expenditure plan would appear to be consistent with the Estimated Replacement Year. The Southern Cross Asset Register shows two of the three pump stations requiring replacement in 2008, the capital expenditure plan has these scheduled in for 2006/2007 and 2007/2008.	3
14	REVIEW		
14.1	Is a review process in place to ensure that asset management plans are kept current?	There is currently no evidence of a formal process in place to ensure that the Asset Management Plan is kept up to date. The plans were recently been updated by SMEC in May 2005, the previous version was dated December 1999. The Asset Management Plan should be updated to include a section on the review process, when it occurs and what it is required to ensure the process is completed adequately.	1
14.2	Are asset management plans being reviewed at appropriate intervals?	The Asset Management Plan was last updated in May 2005, the previous version was dated December 1999. The plan should be reviewed more frequently, at least once every two or three years, in line with the Operational Audit and Asset Management Review.	1
14.3	Are the asset management plans current?	The Asset Management Plans were last updated in May 2005.	2

4.3 CONCLUSION

The new treatment plant should be of great benefit to the Southern Cross community with the increased supply of better quality waste water for public areas. This is consistent with the Shire's intent to invest in the town's infrastructure for the benefit of the town residents.

The review of the asset management system shows that base practices are in place and in most areas, the processes are planned and tracked. The main exceptions relate to the areas of formalising risk management, more detailed contingency planning, and documenting procedures for review and updating of the Asset Management Plan. These improvements would help to reduce the risk of reliance on key people for the continued effective operation of the asset management system. A risk analysis would also help to identify specific risks that warrant further resources being allocated to ensure that the Shire is well-prepared for any potential disruptions to waste treatment services.

END OF REPORT